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ISO/TC 211 Geographic information/Geomatics

Title: New work item proposal: Geographic information - Profile - FACC Data Dictionary

Source: DGIWG

Target date: 2000-03-06

Status: New work item proposal

Required action: P-members are requested to complete and return the ballot form to the ISO/TC 211 secretariat no later than 2000-03-06

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NEW WORK ITEM PROPOSAL	
Date of presentation 1999-12-06	Reference number (to be given by secretariat)
Proposer DGIWG	ISO/TC 211 /SC N 834
Secretariat NSF	

A proposal for a new work item (including proposals for amendment or revision of an existing standard) **within the scope of an existing technical committee or subcommittee** shall be submitted to the secretariat of that technical committee or subcommittee with a copy to the Central Secretariat and, in the case of a sub-committee, a copy to the secretariat of the parent technical committee. The proposal will be circulated to the P-members of the technical committee or subcommittee for voting, and to the O-members for information. The proposer may be a member body of ISO, the secretariat itself, another technical committee or subcommittee, an organization in liaison, the Technical Management Board or one of the advisory groups, or the Secretary-General. Guidelines for proposing and justifying a new work item are given in the ISO/IEC Directives (part 1, annex Q) (see extract overleaf).

The proposal (to be completed by the proposer)

<p>Title of proposal (in the case of an amendment or revision, or a new part, of an existing standard, show the standard number)</p> <p>Geographic information - Profile - FACC Data Dictionary</p>	
<p>Scope (as defined in 6.2.1 of part 3 of the ISO/IEC Directives)</p> <p>This International Standard is a profile. It is based on rules and methods defined in ISO CD 19110 (15046-10) Geographic information - Feature cataloguing methodology, in the context of DGIWG. It defines a Data Dictionary and includes the definition of Features and Attributes only, which may be of use to the wider international community.</p>	
<p>Purpose and justification (attach a separate page as annex, if necessary)</p> <p>See annex</p>	
<p>Target date (indicate the date by which the availability of the International Standard is considered to be necessary) 30 April 2001</p>	
<p>Relevant documents to be considered</p> <p>ISO 19110 (15046-10) Geographical information - Feature catalogue methodology, NATO STANAG 7074 DIGEST 2.0, Part 4 FACC, 1997</p>	
<p>Relationship of project to activities of other international bodies</p> <p>The DGIWG has maintained the FACC Data Dictionary as part of the DIGEST standard for many years. FACC is used as part of a Feature Catalogue within the context of Product Specifications for many DIGEST compatible products. The DGIWG and IHO have also worked to harmonize the FACC Data Dictionary with the Data Dictionary defined in the IHO S-57 "Object Catalogue".</p>	
<p>Liaison organizations</p> <p>DGIWG, IHO</p>	<p>Need for coordination within ISO and IEC</p> <p>ISO/IEC JTC1 SC24</p>

Preparatory work

A draft is attached

An outline is attached and it will be possible to supply a draft by (date)

Proposed project leader (name and address):

Debra LaMarque, Cranfield University, Cranfield, Bedford MK43 0AL, UK

<p>Concerns known patented items (see part 2 of the ISO/IEC Directives)</p> <p><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p> <p>If YES, provide full information as annex</p>	<p>Signature of the proposer</p> <p>Herman Dohmann, Chairman, DGIWG Technical Committee</p>
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<p>Date of circulation</p> <p>1999-12-06</p>	<p>Closing date for voting</p> <p>2000-03-06</p>	<p>Signature of the TC or SC secretary</p> <p>Bjørnhild Sæterøy (signature on file)</p>
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Comments and recommendations of the TC or SC secretariat

Comments with respect to the proposal in general, and recommendation thereon

(Indicate any issues to be brought to the notice of committee members. For instance, refer to any associated vote on form 5 regarding adoption of any attached draft for direct progression to CD or DIS.)

Elements to be clarified when proposing a new work item (new standard)

Title

Indicate the subject matter of the proposed new standard.

Scope

Give a clear indication of the coverage of the proposed new work item and, if necessary for clarity, exclusions.

Purpose and justification

Give details based on a critical study of the following elements wherever practicable.

- a) The specific aims and reason for the standardization activity, with particular emphasis on the aspects of standardization to be covered, the problems it is expected to solve or the difficulties it is intended to overcome.
- b) The main interests that might benefit from or be affected by the activity, such as industry, consumers, trade, governments, distributors.
- c) Feasibility of the activity: Are there factors that could hinder the successful establishment or general application of the standard?
- d) Timeliness of the standard to be produced: Is the technology reasonably stabilized? If not, how much time is likely to be available before advances in technology may render the proposed standard outdated? Is the proposed standard required as a basis for the future development of the technology in question?
- e) Urgency of the activity, considering the needs of other fields or organizations. Indicate target date and, when a series of standards is proposed, suggest priorities.
- f) The benefits to be gained by the implementation of the proposed standard; alternatively, the loss or disadvantage(s) if no standard is established within a reasonable time. Data such as product volume or value of trade should be included and quantified.
- g) If the standardization activity is, or is likely to be, the subject of regulations or to require the harmonization of existing regulations, this should be indicated.

If a series of new work items is proposed, the purpose and the justification of which is common, a common proposal may be drafted including all elements to be clarified and enumerating the titles and scopes of each individual item.

Relevant documents

List any known relevant documents (such as standards and regulations), regardless of their source. When the proposer considers that an existing well-established document may be acceptable as a standard (with or without amendments) indicate this with appropriate justification and attach a copy to the proposal.

Cooperation and liaison

List relevant organizations or bodies with which cooperation and liaison should exist.

Preparatory work

Indicate whether the proposer or the proposer's organization is prepared to undertake the preparatory work required for the new work item.

Annex to Purpose and justification

The DGIWG has worked with ISO/TC 211 since the establishment of the ISO Technical Committee, with respect to the development of the ISO/TC 211 suite of standards. Since the beginning, the intent of DGIWG has been to develop profiles of the ISO Geographic Information standards that correspond to the components of the DIGEST standard. DGIWG has been active in the development of the TC 211 standards to ensure that these standards are capable of being used to develop profiles corresponding to the DIGEST standard. The structure of DIGEST and the FACC Data Dictionary are described in the ISO TR 19120 Geographic information - Functional standards.

The FACC Data Dictionary is the first of the parts of DIGEST to be proposed as an ISO/TC 211 profile. The intent is that FACC will also retain its DIGEST status as part of STANAG 7074 and that the profile will be maintained by DGIWG.

DGIWG has worked closely with the International Hydrographic Organization (IHO), also a Class A Liaison with TC 211, with respect to the relationship of the FACC to the IHO S-57 Object Catalogue. A direct conversion has been defined at the feature and attribute level. In addition, a conversion has been developed between the DNC product specification and the IHO ENC product specification for Nautical Charts.

The DIGEST FACC has been completely reformatted and updated to align with the rules described in the TC 211 Committee Draft standard CD 19110 Geographic information – Feature cataloguing methodology, with respect to that part addressing a data dictionary.

Annex A - Feature Codes

TABLE OF CONTENTS

Code	Name
A - Culture	
AA - Culture-Extraction	
AA010	Mine
AA011	Quarry/Mine Shear Wall
AA012	Quarry
AA013	Pit
AA040	Rig/Superstructure
AA050	Well
AA051	Wellhead
AA052	Oil/Gas Field
AA060	Gradation Works
AB - Culture-Disposal	
AB000	US-Disposal Site/Waste Pile UK-Refuse Tip/Slag Heap
AB010	Wrecking Yard/Scrap Yard
AB020	US-Burner UK-Flare Stack
AB021	Diffuser
AB030	Waste Processing Facility
AC - Culture-Processing Industry	
AC000	Processing Plant/Treatment Plant
AC010	Blast Furnace
AC020	Catalytic Cracker
AC030	Settling Basin/Sludge Pond
AC040	Oil/Gas Facilities
AC050	Works
AD - Culture-Power Generation	
AD010	US-Power Plant UK-Power Station
AD020	Solar Panels
AD030	Substation/Transformer Yard
AD040	Nuclear Reactor
AD050	Heating Plant
AE - Fabrication Industry	
AE010	Assembly Plant
AF - Culture-Associated Industrial Structures	
AF010	Chimney/Smokestack
AF020	Conveyor
AF030	Cooling Tower
AF040	Crane
AF041	Sheerlegs (Shear Legs)
AF050	US-Dredge/Powershovel/Dragline UK-Dredger/Powershovel/Dragline
AF060	Engine Test Cell

Code	Name
AF070	Flare Pipe
AF080	Hopper
AG - Culture-Commercial	
AH - Culture-Institutional/Government	
AH010	Bastion/Rampart/Fortification
AH020	Trench
AH050	Fortification
AH060	Underground Bunker
AH070	Checkpoint
AI - Culture-Residential	
AI020	US-Mobile Home/Mobile Home Park UK-Caravan/Caravan Park/Mobile Home/Mobile Home Park
AI030	Camp
AJ - Culture-Agriculture	
AJ010	Circular Irrigation System
AJ020	Siphon
AJ030	Feed Lot/Stockyard/Holding Pen
AJ050	Windmill
AJ051	Windmotor
AK - Culture-Recreational	
AK020	Amusement Park Attraction
AK030	Amusement Park
AK040	US-Athletic Field UK-Athletic Field/Sports Field/Playing Field
AK050	Tennis Court(s)
AK060	Campground/Campsite
AK061	Picnic Site
AK070	US-Drive In Theater UK-Drive-in Theatre
AK080	US-Drive In Theater Screen UK-Drive-in Theatre Screen
AK090	US-Fairgrounds UK-Fairground
AK091	Exhibition Grounds
AK100	Golf Course
AK101	Golf Driving Range
AK110	Grandstand
AK120	Park
AK121	Lookout
AK130	US-Race Track UK-Race Track/Race Course
AK150	Ski Jump
AK155	Ski Track
AK160	US-Stadium/Amphitheater UK-Stadium/Ampitheatre
AK170	Swimming Pool
AK180	Zoo/Safari Park
AK190	Fishing Pier/Promenade Pier

Code	Name
AL - Culture-Miscellaneous Features	
AL005	Animal Sanctuary
AL012	Archeological Site
AL015	Building
AL018	Building Superstructure Addition
AL019	Shed
AL020	Built-Up Area
AL025	Cairn
AL030	US-Cemetery UK-Cemetery/Graveyard
AL040	Cliff Dwelling
AL045	Complex Outline
AL050	US-Display Sign UK-Display Sign/Notice Board
AL060	Dragon Teeth
AL070	Fence
AL073	Flagstaff/Flagpole
AL075	Gallery
AL080	Gantry
AL090	US-Grave Marker UK-Grave Marker/Tombstone
AL100	Hut
AL101	Cabin
AL105	Settlement
AL110	US-Light Standard/Light Support UK-Light Standard/Light Support/Lamp Post
AL116	Calvary Cross
AL120	Missile Site
AL130	US-Monument UK-Monument/Folly
AL135	Native Settlement
AL140	Particle Accelerator
AL141	Telescope
AL155	Overhead Obstruction Location
AL170	Plaza/City Square
AL195	Ramp
AL200	Ruins
AL201	Historic Site/Point of Interest
AL210	Snow Shed/Rock Shed
AL220	US-Steeple UK-Steeple/Spire
AL240	Tower (Non-Communication)
AL241	Tower (General)
AL250	Underground Dwelling
AL260	Wall
AM - Culture-Storage	
AM010	Depot (Storage)

Code	Name
AM020	Grain Bin/Silo
AM030	Grain Elevator
AM031	Timber Yard
AM040	US-Mineral Pile UK-Mineral Pile/Mineral Tip
AM060	Storage Bunker/Storage Mound
AM070	Tank
AM080	Water Tower
AN - Culture-Transportation-Railroad	
AN010	US-Railroad UK-Railway
AN050	US-Railroad Siding/Railroad Spur UK-Railway Siding/Railway Spur
AN060	Railroad Yard/Marshalling Yard
AN065	Railhead
AN075	US-Railroad Turntable UK-Railway Turntable
AN080	US-Railroad Switch UK-Railroad Points
AP - Culture-Transportation-Road	
AP010	Cart Track
AP020	US-Interchange UK-Interchange/Complex Junction
AP030	Road
AP040	Gate
AP041	Barrier
AP050	US-Trail UK-Trail/Footpath
AP060	Drove
AQ - Culture-Associated Transportation	
AQ010	US-Aerial Cableway Lines/Ski Lift Lines UK-Aerial Cableway Lines/Ski Lift Cables
AQ020	Aerial Cableway Pylon/Ski Pylon
AQ021	Mast
AQ030	US-Boardwalk UK-Wooden Causeway
AQ040	Bridge/Overpass/Viaduct
AQ045	Bridge Span
AQ050	Bridge Superstructure
AQ055	Bridge Tower/Bridge Pylon
AQ056	Bridge Pier
AQ058	Constriction/Expansion
AQ060	Control Tower
AQ062	US-Crossing UK - Crossing/Level Crossing
AQ064	Causeway
AQ065	Culvert
AQ068	Drop Gate/Rolling Block
AQ070	Ferry Crossing
AQ080	US-Ferry Site UK-Ferry Station
AQ090	Entrance/Exit

Code	Name
AQ100	US-Landmark Post/Distance Post UK-Landmark Post/Distance Post/Milestone
AQ110	Mooring Mast
AQ111	Prepared Raft or Float Bridge Site
AQ113	Pipeline/Pipe
AQ116	Pumping Station
AQ118	US-Sharp Curve(s) UK-Sharp Bend(s)
AQ119	Route Marker
AQ120	Steep Grade
AQ125	Station (Miscellaneous)
AQ130	Tunnel
AQ135	US-Vehicle Stopping Area/Rest Area UK-Vehicle Stopping Area/Rest Area/Lay By
AQ140	US-Vehicle Storage/Parking Area UK-Vehicle Storage/Parking Area/Car Park/Boat Park
AQ150	Flight of Steps
AR - Culture-Air Traffic Services	
AT - Culture-Communications/Transmission	
AT005	Cable
AT006	Overhead Cable
AT010	US-Disk/Dish UK-Disk Aerial/Dish Aerial
AT020	Early Warning Radar Site
AT030	Power Transmission Line
AT040	US-Power Transmission Pylon UK-Power Transmission Pylon/Pole
AT041	Telepheric
AT045	Radar Transmitter
AT050	Communication Building
AT060	Telephone Line/Telegraph Line
AT070	Telephone-Telegraph Pylon/Pole
AT080	Communication Tower
AU - Culture-Airport	
B - Hydrography	
BA - Hydrography-Coastal Hydrography	
BA010	Coastline/Shoreline
BA020	Foreshore
BA021	Nearshore (Precise IHO)
BA022	Backshore (Precise IHO)
BA023	Foreshore (Precise IHO)
BA030	Island
BA040	Water (Except Inland)
BA050	Beach
BA051	Dyke Crown

Code	Name
BB - Hydrography-Ports and Harbors	
BB005	US-Harbor UK-Harbour
BB006	US-Harbor Complex UK-Harbour Complex
BB007	Channel Edge
BB010	Anchorage
BB011	Anchorage (Complex Feature)
BB012	Anchor Berth
BB019	Anchor
BB020	Berth
BB021	Mooring Trot
BB022	Basin
BB030	Bollard
BB040	Breakwater/Groyne
BB041	Breakwater
BB042	Mole
BB043	Groin
BB050	Calling-In Point
BB079	Mooring/Warping Facility
BB080	Dolphin
BB081	Shoreline Construction
BB090	US-Drydock UK-Dry Dock
BB100	US-Fish Stakes UK-Fishing Stakes
BB105	US-Fishing Harbor UK-Fishing Harbour
BB110	Fish Traps/Fish Weirs
BB111	Tunny (Tuna) Nets Area
BB115	US-Gridiron UK-Gridiron/Careening Grid
BB140	US-Jetty UK-Training Wall
BB150	Landing Place
BB151	Landing Stairs
BB155	Maritime Station/Maritime Signal Station
BB160	Mooring Ring
BB170	US-Offshore Loading Facility UK-Single Point Mooring
BB180	Oyster Bed/Mussel Bed
BB190	US-Pier/Wharf/Quay UK-Pier/Wharf/Quay/Jetty
BB198	Fender
BB199	Floating Dock
BB200	Pump Out Facility
BB201	Small Craft Facility
BB202	Ice Boom
BB220	Ramp (Maritime)
BB225	Rip Rap
BB226	Revetment (Shore Protection)

Code	Name
BB230	Seawall
BB240	Slipway/Patent Slip
BB250	Watering Place
BC - Hydrography-NAVAIDs	
BC010	Beacon
BC020	Buoy
BC030	Leading Light(s)
BC031	Navigation Line
BC032	Radar Line
BC033	Radar Range
BC035	Lights in Line
BC040	Light
BC050	Lighthouse
BC055	Marker
BC060	Light Sector
BC070	Light Vessel/Lightship
BC080	Perches/Stakes
BC098	Navigational Mark, Afloat
BC099	Navigational Mark, Fixed
BC100	Leading Line
BC101	Fog Signal
BC102	Direction of Lateral Buoyage
BD - Hydrography-Dangers/Hazards	
BD000	US-Underwater Danger/Hazard UK-Underwater Danger
BD001	Mine-Naval
BD005	Miscellaneous Underwater Feature
BD010	Breakers
BD020	Crib
BD030	US-Discolored Water UK-Discoloured Water
BD040	Eddies
BD050	US-Foul Ground UK-Foul
BD060	Kelp/Seaweed
BD070	Obstruction (Nautical)
BD071	Log Boom/Booming Ground
BD072	Pontoon
BD073	Oil Barrier
BD074	Chain/Wire
BD079	Fishing Facility
BD080	Overfalls/Tide Rips
BD100	Pile/Piling/Post
BD110	Platform
BD111	Offshore Platform Site (cleared)

Code	Name
BD112	Production Installation
BD119	Ledge
BD120	Reef
BD121	Pingo
BD130	Rock
BD140	US-Snags/Stumps UK-Snags/Submerged Stumps
BD180	Wreck
BD181	Hulk
BE - Hydrography-Depth Information	
BE010	Depth Curve
BE015	Depth Contour
BE019	Depth Area
BE020	Sounding
BE021	Drying Line, Low Water Line-LWL
BE022	Sand Line
BE023	Mud Line
BE029	Bottom Return
BE030	Track Swath
BE040	Track Line
BE050	Beach Profile
BF - Hydrography-Bottom Features	
BF010	US-Bottom Characteristics UK-Quality of the Bottom
BF011	Bottom Feature
BG - Hydrography-Tide and Current Information	
BG010	US-Current Flow UK-Current Flow/Tidal Stream Direction
BG011	Tideway
BG012	Water Turbulence
BG020	Tide Gauge
BG030	US-Tide Data Point UK-Tidal Stream Observation Station
BG040	US-Current Diagram UK-Tidal Stream Diagram
BH - Hydrography-Inland Water	
BH000	Inland Water
BH010	Aqueduct
BH015	Bog
BH020	Canal
BH030	Ditch
BH040	Filtration Beds/Aeration Beds
BH050	Fish Hatchery/Fish Farm/Marine Farm
BH060	Flume
BH070	Ford
BH075	Fountain
BH077	Hummock

Code	Name
BH080	Lake/Pond
BH090	Land Subject to Inundation
BH091	Flooded Area
BH095	Marsh/Swamp
BH100	Moat
BH110	Penstock
BH115	Underground Water/Phreatic Water
BH120	Rapids
BH130	Reservoir
BH135	Rice Field
BH140	River/Stream
BH141	River Bank
BH145	River/Stream Vanishing Point
BH150	Salt Pan
BH155	Salt Evaporator
BH160	Sebkha
BH165	Spillway
BH170	Spring/Water Hole
BH175	Trough
BH180	Waterfall
BH190	Lagoon/Reef Pool
BH200	Miscellaneous Surface Drainage Feature
BH210	Inland Shoreline
BH501	River Navigation Route
BI - Hydrography-Miscellaneous Inland Water	
BI005	Boat Lift
BI010	Cistern
BI020	Dam/Weir
BI030	Lock
BI039	Sluice
BI040	Sluice Gate
BI041	Gate (Nautical)
BI042	US-Caisson UK-Dry Dock Gate
BI043	Flood Barrage
BI050	Water Intake Tower
BI060	Fish Ladder
BI070	Gauging Station
BI080	Boat Turning Basin
BJ - Hydrography-Snow/Ice	
BJ020	Moraine
BJ030	Glacier
BJ040	Ice Cliff

Code	Name
BJ060	Ice Peak/Nunatak
BJ065	Ice Shelf
BJ070	Pack Ice
BJ080	Polar Ice
BJ100	Snow Field/Ice Field
BJ110	Tundra
BK - Hydrography-Oceanographic or Geophysical	
BK010	Acoustic Station
BK020	Magnetic Station
BK030	Oceanographic Collection Device
C - Hypsography	
CA - Hypsography-Relief Portrayal	
CA010	Contour Line (Land)
CA020	Ridge Line
CA025	Valley Bottom Line
CA026	Breakline
CA030	Spot Elevation
CA035	Inland Water Elevation
CA040	Contour Polygon (Land)
D - Physiography	
DA - Physiography-Exposed Surface Materials	
DA005	Asphalt Lake
DA006	Alkali Flats
DA010	Ground Surface Element
DA020	Barren Ground
DA030	Land Area
DA031	Land Region
DB - Physiography-Landforms	
DB010	Bluff/Cliff/Escarpment
DB030	Cave
DB031	Hill
DB060	Crevice/Crevasse
DB070	Cut
DB080	Depression
DB090	Embankment/Fill
DB100	Esker
DB110	Fault
DB115	Geothermal Feature
DB145	Miscellaneous Obstacle
DB150	Mountain Pass
DB160	Rock Strata/Rock Formation
DB170	Sand Dune/Sand Hills

Code	Name
DB176	Slope Category
DB180	Volcano
DB190	Volcanic Dike
DB200	US-Gully/Gorge UK-Gullies
DB210	US-Potential Landslide Area UK-Landslide/Scree
DB211	Landslide
DB220	Undermined Land
DB230	Fan
DB500	Bottomline of Cliff
DB501	Topline of cliff
E - Vegetation	
EA - Vegetation-Cropland	
EA010	Cropland
EA020	Hedgerow
EA030	Nursery
EA031	Botanical Garden
EA040	Orchard/Plantation
EA050	Vineyards
EA055	Hops
EB - Vegetation-Rangeland	
EB010	Grassland
EB015	Grass/Scrub/Brush
EB020	Scrub/Brush/Bush
EB030	Land Use/Land Cover (Vegetation)
EC - Vegetation-Woodland	
EC010	Bamboo/Cane
EC015	Forest
EC020	Oasis
EC030	Trees
EC040	US-Cleared Way/Cut Line/Firebreak UK-Cleared Way/Firebreak
ED - Vegetation-Wetland	
EE - Vegetation-Miscellaneous Features	
EE000	Miscellaneous Vegetation
EE010	Logging Area
EE020	Land devoid of vegetation
F - Demarcation	
FA - Demarcation-Boundaries/Limits/Zones (Topographic)	
FA000	Administrative Boundary
FA001	Administrative Area
FA005	Access Zone
FA015	Firing Range/Gunnery Range
FA020	Armistice Line

Code	Name
FA030	Cease-Fire Line
FA040	Claim Line
FA041	Contact Zone
FA050	Mandate Line/Convention Line
FA060	Defacto Boundary
FA070	Demilitarized Zone
FA080	National Park
FA081	Nature Reserve
FA082	Protected Water, Gathering Ground
FA090	Geophysical Prospecting Grid
FA100	Test Area
FA110	International Date Line
FA165	Training Area
FA170	Zone of Occupation
FB - Demarcation-Boundaries/Limits/Zones (Aeronautical)	
FC - Demarcation-Boundaries/Limits/Zones (Hydrographic)	
FC021	Maritime Limit Boundary
FC031	Maritime Area
FC035	Pond Partition
FC036	Restricted Area
FC040	Traffic Separation Scheme System
FC041	Traffic Separation Scheme (TSS)
FC100	Measured Distance Line
FC101	Theodolite Line
FC102	Range Centerline
FC130	Radar Reference Line
FC165	Route (Maritime)
FC166	Deep Water Route
FC167	Defined Water
FC168	Canal Route
FC170	Safety Fairway
FC177	Swept Area
G - Aeronautical Information	
GA - Aeronautical Information-Air Routes	
GA005	Airspace
GA010	ATS Route Segment/Leg
GA015	Special Use Airspace
GA020	Airspace Boundary Segment
GA025	Special Use Airspace Segment
GA030	Off Route Radial/Bearing
GA031	Lead Radial
GA035	NAVAIDS (Aeronautical)

Code	Name
GA045	Route (Air)
GA047	Complex Terminal Route
GA055	Waypoint/Reporting-Calling In Point
GA065	Air Warning Light
GB - Aeronautical Information-Aerodrome	
GB005	US-Airport/Airfield UK-Airport/Airfield/Airstrip
GB006	US-Airfield UK-Airstrip
GB007	Airport Area
GB010	Airport Lighting
GB015	US-Apron/Hardstand UK-Apron/Hardstanding
GB020	Arresting Gear
GB025	Blast Barrier
GB030	Helicopter Landing Pad
GB035	Heliport
GB040	Launch Pad
GB045	Overrun/Stopway
GB050	Revetment (Airfield/Equipment/Facilities)
GB055	Runway
GB057	Shoulder
GB060	Runway Radar Reflector
GB065	Seaplane Base
GB070	Seaplane Landing/Seaplane Take-Off Area
GB075	Taxiway
GB080	US-Wind Indicator UK-Wind Indicator/Wind Sock
GB160	Decontamination Pad
GB170	INS Alignment Pad
GB220	Air Obstruction
GB221	Miscellaneous Air Obstruction
I - Cadastral	
IA - Cadastral-Areas	
IA010	Map Boundary
IA040	Parcel
IA050	Cadastral Constructions
ID - Cadastral-Reference Points	
ID010	Cadastral Control Points
ID020	Fiducial Points
IE - Cadastral-Special Characteristics	
IE010	Map Sheet Frame
IE020	Miscellaneous
IE040	Map-Info
S - Special Use (Dataset Specific)	
SA - Terrain Analysis Dataset	

Code	Name
SA010	Common Open Water
SA020	Disturbed Soil
SA030	Exposed Bedrock
SA040	Permanent Snowfield
SA050	Slope Polygon
SA060	Covered Drainage
SB - Background Display Dataset	
SC - Transportation and Logistics Dataset	
SD - Aeronautical Information Dataset	
SE - Toponymic Dataset	
SF - Simulation Dataset	
SU - Dataset Development	
SU001	Military Base
SU002	US-Subway UK-Underground Railway/Metro
SU003	Port Facility
Z - General	
ZA - General-Annotation	
ZB - General-Control Points	
ZB020	Benchmark
ZB030	US-Boundary Monument UK-Boundary Monument/Boundary Mark
ZB035	Control Point/Control Station
ZB036	Distance Mark
ZB040	Diagnostic Point
ZB060	Geodetic Point
ZC - General-Magnetic Variation	
ZC040	US-Magnetic Disturbance Area UK-Local Magnetic Anomaly
ZC050	Isogonic Lines
ZC051	Magnetic Pole
ZD - General-Miscellaneous	
ZD001	Network
ZD003	Artifact Location
ZD012	Geographic Information Point
ZD015	Point of Change
ZD020	Void Collection Area
ZD040	Named Location
ZD045	Text Description
ZE - General-Background Features	

Annex B - Attribute and Value Codes
TABLE OF CONTENTS

Code	Name
AAH	Absolute Horizontal Accuracy
AAV	Absolute Vertical Accuracy
ACC	Accuracy Category
AFA	Available Facilities
AGC	Arresting Gear Category
AHA	Absolute Horizontal Accuracy in Meters
AHC	Associated Hydrographic Category
AHO	Accuracy of Obstruction Height Above Ground Level
AIA	Airspace Identification Attribute
ALC	Aircraft Load Class
ALN	Air route segments Length
AOO	Angle of Orientation
APT	Airfield Type
ARA	Area Coverage Attribute
ARE	Area with greater than 1 meter squared resolution
ARH	Area Coverage Attribute Hectares
ARR	Angle of Radar Reflector
ATC	Aqueduct Type Category
ATL	ATS Route Level
ATN	Aids to Navigation
AUA	ATS Use Attribute
AUB	Airspace Use Boundary
AUL	Airspace Use Limitations
AUR	Airspace Use Routes
AUS	Airspace/Facility Operating Times
AV1	Lowest Airspace Height
AV2	Highest Airspace Height
AVA	Absolute Vertical Accuracy in Meters
AWD	Air Route Segments Width
AZ1	Lowest Airspace Z-value
AZ2	Highest Airspace Z-value
AZ3	Minimum Safe Altitude Sector
BAC	Built-Up Area Classification
BCC	Bypass Condition Category
BCR	Bottom Return Rock Classification
BCT	Bottom Configuration Type
BDC	Bridge Design Category
BEN	Basic Encyclopedia Number
BER	Berth Identifier
BET	Beacon Type Category
BFC	Building Function Category
BGL	Bank Gradient Left

Code	Name
BGR	Bank Gradient Right
BHL	Bank Height Left
BHR	Bank Height Right
BIT	Beach Indicator Type
BLC	Barge Load Class
BMC	Bottom Materials Composition
BOC	Bog Category
BOT	Bridge Opening Type
BR2	Broadcast Frequency (2)
BRA	Bottom Return Attributes Classification
BRC	Bottom Return Classification
BRF	Broadcast Frequency
BRG	Bearing of Object
BRI	Bottom Return Identity Classification
BRN	Bridge Reference Number
BRO	Bottom Return Obstacles Classification
BRR	Bearing and Reciprocal Category
BRS	Bearing From Seaward
BRT	Bottom Return Track Number
BRW	Bottom Return Wreck Classification
BSC	Bridge/Bridge Superstructure Category
BSM	Bridge Span Mobility
BSN	Bridge Serial Number
BSP	Bridge Span Category
BSR	Bottom Return Seabed Inst.
BST	Boundary Status Type
BTC	Beacon/Buoy Type Category
BUD	Brush/Undergrowth Density Code
BUT	Buoy Type Category
BVL	Bank Vegetation Left
BVR	Bank Vegetation Right
BWL	Below Water Bank Slope (Left)
BWR	Below Water Bank Slope (Right)
C60	Rate of Current (IHO)
C61	Rate of Current (1) (IHO)
C62	Rate of Current (2) (IHO)
C63	Rate of Current (3) (IHO)
C64	Rate of Current (4) (IHO)
C65	Rate of Current (5) (IHO)
C66	Rate of Current (6) (IHO)
C67	Rate of Current (7) (IHO)
C68	Rate of Current (8) (IHO)
C69	Rate of Current (9) (IHO)
C70	Rate of Current (10) (IHO)

Code	Name
C71	Rate of Current (11) (IHO)
C80	Rate of Current
C81	Rate of Current (1)
C82	Rate of Current (2)
C83	Rate of Current (3)
C84	Rate of Current (4)
C85	Rate of Current (5)
C86	Rate of Current (6)
C87	Rate of Current (7)
C88	Rate of Current (8)
C89	Rate of Current (9)
C90	Rate of Current (10)
C91	Rate of Current (11)
CAB	Cable Classification
CAC	Collection Attribute Category
CAP	Capacity
CCA	Constriction/Expansion Category
CCC	Color Code Category
CCR	Color Code Remarks
CDA	Covered Drain Attribute
CDL	Covered Drain Length
CDP	Calendar Date Type
CDV	Calendar Date Value
CET	Cut/Embankment Type Category
CFD	Cultural Feature Density
CHA	Light Characteristic Category
CHL	Channel Number
CIC	Color Intensity Category
CLI	Communication Lines Isolation
COC	Conspicuous Category
COD	Certainty of Delineation
COE	Certainty of Existence
COL	Character of Light
COT	Contour Type Category
CPA	Control Point Attribute
CRA	Crane Type Category
CRC	Crossing Category
CRM	Crane Mobility Type
CRN	Current Rate Minimum
CRS	Current Rate (Speed)
CRV	Depth Curve or Contour Value
CRX	Current Rate Maximum
CSC	Crossing Control Category
CSM	Secondary Material Characteristics

Code	Name
CTC	Culvert Type Category
CTL	Cumulative Track Length
CUR	Current Type Category
CVH	Depth Curve or Contour Value High
CVL	Depth Curve or Contour Value Low
D60	Direction of Current (IHO)
D61	Direction of Current (1) (IHO)
D62	Direction of Current (2) (IHO)
D63	Direction of Current (3) (IHO)
D64	Direction of Current (4) (IHO)
D65	Direction of Current (5) (IHO)
D66	Direction of Current (6) (IHO)
D67	Direction of Current (7) (IHO)
D68	Direction of Current (8) (IHO)
D69	Direction of Current (9) (IHO)
D70	Direction of Current (10) (IHO)
D71	Direction of Current (11) (IHO)
D80	Direction of Current
D81	Direction of Current (1)
D82	Direction of Current (2)
D83	Direction of Current (3)
D84	Direction of Current (4)
D85	Direction of Current (5)
D86	Direction of Current (6)
D87	Direction of Current (7)
D88	Direction of Current (8)
D89	Direction of Current (9)
D90	Direction of Current (10)
D91	Direction of Current (11)
DAN	Description of Aids to Navigation
DEP	Depth Below Surface Level
DF1	Direction of Traffic - 1
DF2	Direction of Traffic - 2
DF3	Direction of Traffic - 3
DF4	Direction of Traffic - 4
DFT	Dam Face Type
DGC	Drop Gate Category
DIR	Directivity
DMB	Density Measure (Brush/Undergrowth)
DMF	Density Measure (Feature Count)
DMK	Density Measure (% of Kelp Cover)
DMR	Density Measure (% of Roof Cover)
DMS	Density Measure (Structure Count)
DMT	Density Measure (% of Tree/Canopy Cover)

Code	Name
DOF	Direction of Flow
DP1	Highest level of groundwater
DP2	Lowest level of groundwater
DR1	Depth Range Value 1
DR2	Depth Range Value 2
DR3	Depth Range With greater than 1 meter resolution - Value 1
DR4	Depth Range With greater than 1 meter resolution - Value 2
DRP	Description of Reference Point
DRW	Density of Woody Vegetation Range
DTE	Date End
DTS	Date Start
DW1	Depth of Water (1)
DW2	Depth of Water (2)
EBT	Educational Building Type
EDP	Electronic Depth
ELA	Elevation Accuracy
EOL	Elevation of Light
EPW	Electrical Power Capacity
ETN	Electric Tension
EXS	Existence Category
FCL	Ferry Crossing Length
FCO	Feature Configuration
FCT	Ferry Crossing Times
FDT	Fog Detector
FEO	Feature Element Orientation
FER	Ferry Type
FFA	Fuel Facilities Available
FFC	Fishing Facility Classification
FHC	Harbor Facility Classification
FL1	Flight Level 1
FL2	Flight Level 2
FLT	Floodlit Illumination
FRQ	Frequency of Signal
FRT	Firing Range Type
FTC	Farming Type Category
FTI	Fence Type Indicator
FTP	Fabrication Type
FTR	Feature Rate
FVO	Feature Vertical Orientation
GAW	Gauge Width
GEH	Geomorphic Height
GEN	Generation of Fog Signal Category
GEO	Geographic Location Category
GLI	Greater Than or Equal To/Less Than Contour Interval

Code	Name
GNC	Gate (Nautical) Classification
GPD	Geomorphic Depth
GRP	Group of Signals Definition
GSC	Ground Slope Category
GTC	Gate Type Category
GUG	Guyed or Unguyed Category
GW1	Gap Width Range (1)
GW2	Gap Width Range (2)
GW3	Gap Width Range (3)
HCA	Horizontal Clearance Attribute
HCC	Horizontal Clearance Code
HDH	Hydrographic Drying Height
HDI	Hydrographic Depth/Height Information
HDP	Hydrographic Depth
HFC	Hydrological Form Category
HGT	Height Above Surface Level
HGU	Height 2/Depth 2
HID	Harbor Identification Code
HL1	Bank Height Left (1)
HL2	Bank Height Left (2)
HL3	Bank Height Left (3)
HLK	Hulk Type
HLT	Hydrographic Light Type
HOC	Hydrographic Origin Category
HOD	Horizontal Datum Classification
HQC	Hypsography Portrayal Category
HR1	Bank Height Right (1)
HR2	Bank Height Right (2)
HR3	Bank Height Right (3)
HS1	Current Information (1)
HS2	Current Information (2)
HSB	Height Above Sea Bottom
HSC	Hospital Capacity
HTR	Height Range
HWT	House of Worship Type
HYC	Hydrological Category
HZD	Horizontal Datum
IAC	IALA Aid Category
IAS	IMO Adoption Status
IBC	Installation Buoy Classification
ICC	Ice Classification
ICE	Ice Factor
ICL	ICAO Airspace Classification
IDN	Identification Number

Code	Name
IKO	ICAO Designator
IWO	Inland Water Obstruction
JCR	Junction Connectivity Road
KVA	Kilovolt Capacity Attribute
LAB	Label of Feature
LAF	Line Associated Features
LC1	Load Class Type 1
LC2	Load Class Type 2
LC3	Load Class Type 3
LC4	Load Class Type 4
LCN	Light Characteristic Number
LEC	Length of Cab
LEN	Length/Diameter
LFA	Light Function Aeronautical
LFC	Light Function Classification
LNC	Line Characteristic
LOC	Location Category
LOG	Length of Gradient
LOR	Length of Range
LRP	Length of Range With greater than 1 NM resolution
LSA	Light Sector Angle
LSI	Light Sector Angle Initial
LST	Light Sector Angle Terminal
LTN	Track/Lane Number
LVG	Light Range, Geographical
LVL	Light Range, Luminous
LVN	Light Range, Nominal
MAA	Maximum Authorized Altitude
MAC	Maritime Area Category
MAG	Magnetic Variation
MAR	Color of Navigation Mark Classification
MAS	Maintenance Status
MAT	Mine Attributes Classification
MBI	Military Bridge Information
MBL	Maritime Boundary Limit
MCA	Morse Code Attribute
MCC	Material Composition Category
MCS	Material Composition Secondary
MCT	Mooring Connection Type
MCU	Material Composition Underlying
MEA	Minimum Enroute Altitude
MED	Median Category
MFA	Maintenance Facilities Available
MHF	Material Handling Facilities

Code	Name
MIA	Mine Actuation Independent Influence Acoustic Classification
MIC	Mine Actuation Independent Contact Classification
MID	Mine Identity Classification
MII	Mine Actuation Independent Influence Classification
MIM	Mine Actuation Independent Influence Magnetic Classification
MIN	Mining Category
MIO	Mine Actuation Independent Other Classification
MLR	Multiple Light Ranges
MMT	Mine Special Information Special Mine Types Classification
MNA	Mine Actuation Classification
MNC	Mine Actuation Controlled Classification
MNI	Mine Actuation Independent Classification
MNL	Mine Actuation Controlled Cableless Classification
MOC	Minimum Obstruction Clearance
MOL	Multiplicity of Lights
MPC	Mine Position Classification
MPG	Mine Position Ground Classification
MPM	Mine Position Moored Classification
MPO	Mine Position Other Classification
MSC	Mine Status Classification
MSD	Mine Special Information Special Devices Classification
MSH	Mine Special Information Special Devices Anti-Hunting Classification
MSI	Mine Special Information Classification
MSR	Mine Special Information Special Devices Anti-Recovery Classification
MST	Missile Site Type
MSU	Mine Special Information Usefulness Classification
MSW	Mine Special Information Special Devices Anti-Sweep Wire Classification
MTC	Mast Type Category
MTN	Mine Track Number
MTT	Maritime Track Type
MVC	Maximum Vertical Clearance
MWF	Mooring / Warping Facility Classification
MWG	Median Width with greater than 1 meter resolution
NA2	Second Name
NA3	Classification Name
NA4	Country Code (FIPS Pub 10-4)
NAM	Name
NAS	Native Settlement Type
NLC	Navigation Line Classification
NM3	Name 3
NM4	Name 4
NMS	Navigation Mark System
NOP	Number of Platforms
NOS	Number of Spans

Code	Name
NPL	Number of Parallel Lines
NS2	Navigation System Types (2)
NST	Navigation System Types
OBC	Oil Barrier Classification
OCC	Overhead Clearance Category Code
ODF	Opposite Direction of Flow
OHB	Overall Height of Bridge
OHC	Overhead Clearance Category
OHD	Derived Obstacle Height/Depth Category
OLQ	Obstruction Light Quality
OOC	Overhead Obstruction Category
OPC	Offshore Platform Classification
OPS	Operational Status
OPT	Operations Times
OR2	Operating Range Category (2)
ORC	Operating Range Category
ORD	Ordinal Category
ORS	Operating Restrictions
OWO	Over Water Obstruction
PAT	Color Pattern Category
PBP	Pilot Boarding Place Classification
PBV	Pilot Boarding Vehicle
PCC	Percentage Content
PCI	Point of Change Identifier
PCU	Pedestrian Capacity
PDE	Periodic Date End
PDR	Pedestrian Rate
PDS	Periodic Date Start
PER	Period of Light
PEV	Position Evaluation
PFD	Predominant Feature Depth
PFE	Predominant Feature Depth With greater than 1 meter resolution
PFG	Predominant Feature Height With greater than 1 meter resolution
PFH	Predominant Feature Height
PH4	Predominant Height (10 m Range)
PHT	Predominant Height
PIC	Pictorial Representation
PIL	Pilot District
PLC	Pile Classification
PLT	Pipeline Type
POI	Point of Interest
POP	Pond Partition Category
PPC	Power Plant Category
PPL	Populated Place Category

Code	Name
PPT	Populated Place Type
PR1	Periodic Restriction Beginning
PR2	Periodic Restriction Ending
PRC	Periodic Restriction Category
PRM	Permanency
PRO	Product Category
PSC	Physical Surface Characteristics
PST	Physical State Category
PWC	Pier/Wharf /Quay Classification
QID	Quality/Source Record Identifiers
QLE	Releasability
QUA	Quality of Position
QUL	Percentage Reliability of a Qualitative Attribute
QUT	Standard Deviation of a Qualitative Attribute
RAD	Radius of Sharp Curve
RAN	Range of Effectiveness
RAS	Radar Station Classification
RBC	Reliability of Bridge
RCD	Recording Date
RDT	Road Type
REF	Radar Reflector Attribute
REL	Religious Denomination
RET	Reflection Type Category
RFQ	Radar Transponder Beacon Frequency
RGC	Railroad Gauge Category
RGS	Range Significance
RIT	Road Interchange Type
RKF	Rock Strata Formation
RMA	Railroad Maximum Axle Load
RMT	Railroad Maximum Load
RN2	Secondary Route Number
RNK	Ranking of Feature
ROS	Radio Station Classification
RPA	Required Port Access
RRA	Railroad Power Source
RRC	Railroad Categories
RSA	Rail Siding/Spur Attribute
RSC	Rescue Station Classification
RST	Road/Runway Surface Type
RTA	Railroad Track Arrangement
RTB	Radar Transponder Beacon Classification
RTC	Road Type Category
RTN	Route Number
RTP	Reservoir Type

Code	Name
RTT	Route Intended Use
SAW	Signal Station, Warning Classification
SBC	Shelter Belt Condition
SCC	Spring/Well Characteristic Category
SD1	Stem Diameter Size Range (1)
SD2	Stem Diameter Size Range (2)
SDC	Soil Depth Category
SDE	Soil Depth With Greater Precision
SDO	Sand Dune Orientation
SDR	Stem Diameter Size With greater than 1 meter resolution
SDS	Stem Diameter Size
SEA	Sea Area Classification
SEC	Security Classification
SEQ	Sequence of a Signal
SFA	Storage Facilities
SFC	Sea Floor Feature Category
SGC	Gradient/Slope
SGO	Slope Gradient Orientation
SHC	Safe Horizontal Clearance
SHO	Shoreline Category
SHP	Shape of Beacon
SIC	Snow/Ice Category
SIT	Signal Station, Traffic Classification
SL1	Slope Gradient Left (1)
SL2	Slope Gradient Left (2)
SLC	Shipping Load Class
SLT	Shoreline Type Category
SM1	Surficial Material Depth Category
SMC	Surface Material Category
SND	Sounding Category
SOH	Severity of Hazard
SOU	Exposition of Sounding
SPD	Speed Limit (MPH)
SPE	Spot Elevation Category
SPL	Span Length Longest
SPM	Speed Limit (KPH)
SPR	Slope Polygon Range
SR1	Slope Gradient Right (1)
SR2	Slope Gradient Right (2)
SRD	Surface Roughness Description
SRQ	Surface Roughness Qualifier
SSC	Structure Shape Category
SSR	Structure Shape of Roof
SST	Sound Signal Type

Code	Name
STA	Station Type Category (Maritime)
STC	Source Type Code
STG	Soil Trafficability Group (Derived from STP)
STL	Seasonal Tent Location
STP	Soil Types
STQ	Summer Tree Cover Density Code
STR	Summer Tree Cover Density
SUA	Special Use Airspace Altitude Limits
SUE	Survey Date - End
SUP	Supervision of Light
SUR	Survey Category
SUS	Survey Date - Start
SVC	Sounding Velocity
SWC	Soil Wetness Condition
SWL	Single Wheel Bearing Load
SWT	Well/Spring Feature Type
TCL	Tree Canopy Levels
TEC	Technique of Sounding Measurement
TEL	Telescope Category
TID	Tidal/Non-Tidal Category
TIM	Time Attribute
TLN	Total Length
TMC	Top Mark Characteristic
TNG	Tonnage
TOP	Shape of Top Mark
TRA	Traversability
TRE	Tree Type Category
TRF	Traffic Flow
TRK	Recommended Track Classification
TS1	Tree Spacing Range (1)
TS2	Tree Spacing Range (2)
TS3	Tree Spacing Range (3)
TSC	Tree Spacing Category
TSD	Tree Spacing With greater than 1 meter resolution
TSP	Traffic Scheme Part
TSR	Tailored Surface Roughness Description
TSS	Traffic Separation Scheme Classification
TST	Transmission Line Suspension
TTC	Tower Type Category
TUC	Transportation Use Category
TXT	Text Attribute
UBC	Underbridge Clearance Category
UBD	Underbridge Clearance With Greater Precision
UID	Feature Identification Number

Code	Name
UMC	Underlying Material Characteristics
UNI	Units
USE	Usage
USP	Urban Street Pattern
UT1	UTM Grid Northing
UT2	UTM Grid Easting
UTS	UTM Square Identification
UZ1	UTM Grid Zone (1)
UZ2	UTM Grid Zone (2)
VA1	Variation anomaly value with greater than 1 degree resolution
VAL	Value
VAV	Variation Anomaly Value
VC1	Vertical Clearance, Closed With greater than 1 meter resolution
VC2	Vertical Clearance, Opened With greater than 1 meter resolution
VC3	Vertical Clearance, Safe With greater than 1 meter resolution
VCA	Void Collection Attribute
VCC	Vertical Clearance, Closed
VCO	Vertical Clearance, Opened
VCS	Vertical Clearance, Safe
VCT	Void Collection Type
VDC	Vertical (Sounding) Datum Category
VEC	Vehicle Capacity (Number of Vehicles)
VEG	Vegetation Characteristics
VEM	Quality of Vertical Measurement
VGT	Volcanic Geologic Type
VH1	Predominant Vegetation Height Range (1)
VH2	Predominant Vegetation Height Range (2)
VH3	Predominant Vegetation Height Range (3)
VIS	Visibility of Light
VOI	Vertical Obstruction Identifier
VRC	Vegetation Roughness Category
VRR	Vertical Reference Category
WD1	Minimum Traveled Way Width
WD2	Total Usable Width
WD3	Military Gap Width
WD4	Wet Gap Width
WD5	Width Top
WD6	Width Bottom
WDA	Water Depth Average
WDT	Date of report
WFT	Well Feature Type
WGP	Width With greater than 1 meter resolution
WID	Width
WKT	Wreck Type

Code	Name
WLE	Water Level Effect
WOC	Width of Crest
WPC	Work in Progress Category
WPI	Port Index
WPT	Waypoint Description Code
WRK	Wreck Classification
WRN	Wreck Number
WSC	Waste/Scrap Type Category
WSR	Source of report
WT2	Width of Second Traveled Way
WTC	Weather Type Category
WTI	Wall Type Identifier
WTR	Winter Tree Cover Density Code
WV1	Water Velocity Average 1
WVA	Water Velocity Average
XPD	Primary Display Mode
XSA	Spatial Alignment
YDH	Water Depth Mean (Seasonal High Water)
YDL	Water Depth Mean (Seasonal Low Water)
YLN	Length of Greater Precision
YSU	Service Branch
YVH	Water Velocity Mean (Seasonal High Water)
YVL	Water Velocity Mean (Seasonal Low Water)
YWQ	Water Quality Attribute
YWT	Depth to Water Table
ZV1	Lowest Z-value
ZV2	Highest Z-Value
ZV3	Airfield/Aerodrome elevation
ZV6	Lowest Z-value With greater than 1 meter resolution
ZV7	Highest Z-Value with greater than 1 meter resolution
ZVF	Highest Z-Value in Feet

ANNEX A - FEATURE DEFINITION

A - Culture

AA - Culture-Extraction

Name: Mine

Code: AA010

Description: An excavation made in the earth for the purpose of extracting natural deposits. (See also AQ090.)

Name: Quarry/Mine Shear Wall

Code: AA011

Description: The wall facing of the excavation within a quarry/mine.

Name: Quarry

Code: AA012

Description: An excavation created by removal of stone by blasting or cutting.

Name: Pit

Code: AA013

Description: An excavation where gravel, sand, or clay are removed for use elsewhere.

Name: Rig/Superstructure

Code: AA040

Description: A vertical structure fitted for drilling or lifting operations.

Name: Well

Code: AA050

Description: A hole drilled into the earth or sea bed for the extraction of liquids or gases. (See also BH170.)

Name: Wellhead

Code: AA051

Description: The top of a well, as in oil, gas, or water well, that caps the well structure and which may be located on land or partially submerged offshore which nautical vessels can use for lashings.

Name: Oil/Gas Field

Code: AA052

Description: An area where oil and/or gas is pumped or otherwise removed from the ground.

Name: Gradation Works

Code: AA060

Description: Trestle covered with twigs over which brine trickles that is concentrated through increased evaporation.

AB - Culture-Disposal

Name: US-Disposal Site/Waste Pile UK-Refuse Tip/Slag Heap

Code: AB000

Description: An area for the collecting/depositing of refuse or discarded material. (See also AB010, AM010, and AM040.)

Name: Wrecking Yard/Scrap Yard

Code: AB010

Description: An area or site engaged in the wrecking, dismantling, storage, or resale of discarded products. (See also AB000.)

Name: US-Burner UK-Flare Stack

Code: AB020

Description: A permanent structure used for the disposal of waste products by burning.

Name: Diffuser

Code: AB021

Description: An artificial installation at or below water level, where liquids (e.g. cooling water, spillage) are spread out.

Name: Waste Processing Facility

Code: AB030

Description: Operational site with buildings and other facilities, where waste is processed through chemical, physical, biological or thermal procedures or a combination of those procedures (see also AB000 and AB020).

AC - Culture-Processing Industry

Name: Processing Plant/Treatment Plant

Code: AC000

Description: A site used for changing or refining a particular material.

Name: Blast Furnace

Code: AC010

Description: A heat chamber used for smelting iron ore.

Name: Catalytic Cracker

Code: AC020

Description: A unit in which petroleum separation is carried out in the presence of a catalyst.

Name: Settling Basin/Sludge Pond

Code: AC030

Description: A site where solid matter is precipitated from a liquid by evaporating or settling.

Name: Oil/Gas Facilities

Code: AC040

Description: An area involved in the production or distribution of oil or natural gas.

Name: Works

Code: AC050

Description: The structures, grounds, machinery etc. of a manufacturing establishment or structures in engineering such as docks, bridges.

AD - Culture-Power Generation

Name: US-Power Plant UK-Power Station

Code: AD010

Description: The building(s) and equipment necessary for the generation of electric power. (See also AD020.)

Name: Solar Panels

Code: AD020

Description: Units of solar cells for converting sunlight into electrical energy or heat. (See also AD010.)

Name: Substation/Transformer Yard

Code: AD030

Description: A facility, along a power line route, in which electric current is transformed and/or distributed.

Name: Nuclear Reactor

Code: AD040

Description: An apparatus in which a nuclear chain reaction is initiated, sustained, and controlled. (See also AD010.) This code is used to define a nuclear reactor which may be contained within a power plant.

Name: Heating Plant

Code: AD050

Description: Operational site with buildings and other facilities for the generation of thermal energy for heating purposes.

AE - Fabrication Industry

Name: Assembly Plant

Code: AE010

Description: A building or group of buildings used for the purpose of combining manufactured parts to make a completed product.

AF - Culture-Associated Industrial Structures

Name: Chimney/Smokestack

Code: AF010

Description: A vertical structure containing a passage or flue for discharging smoke and gases of combustion.

Name: Conveyor

Code: AF020

Description: An apparatus for moving materials from place to place on a moving belt or series of rollers.

Name: Cooling Tower

Code: AF030

Description: A tower used to cool liquids.

Name: Crane

Code: AF040

Description: A machine for lifting, shifting, and lowering objects or materials by means of a swinging boom or with the lifting apparatus supported on an overhead track.

Name: Sheerlegs (Shear Legs)

Code: AF041

Description: Comprises two or three spars standing on end and lashed together, aloft. They serve as a derrick or tripod to lift heavy weights, step or lower masts, stacks, etc.

Name: US-Dredge/Powershovel/Dragline UK-Dredger/Powershovel/Dragline

Code: AF050

Description: An excavating machine for removing earth or materials.

Name: Engine Test Cell

Code: AF060

Description: A structure wherein engines are tested.

Name: Flare Pipe

Code: AF070

Description: An open-ended pipe at which waste gases are burned.

Name: Hopper

Code: AF080

Description: A top-loaded funnel-shaped structure for temporary holding of loose material which will be dispensed from its bottom.

AH - Culture-Institutional/Government

Name: Bastion/Rampart/Fortification

Code: AH010

Description: A defensive wall built to defend a fort or other defensive work and sometimes equipped with guns.

Name: Trench

Code: AH020

Description: A linear excavation dug for defensive purposes.

Name: Fortification

Code: AH050

Description: A facility constructed for the military defense of a site. (See also AM060.)

Name: Underground Bunker

Code: AH060

Description: An underground facility used by the military either for location of command/control centers or for troop encampment. (See also AL250.)

Name: Checkpoint

Code: AH070

Description: An official place to register, declare or check goods and people.

AI - Culture-Residential

Name: US-Mobile Home/Mobile Home Park UK-Caravan/Caravan Park/Mobile Home/Mobile Home Park

Code: AI020

Description: A site for the permanent parking of trailer(s) used as dwellings and designed without a permanent foundation. (See also AK060 and AQ140.)

Name: Camp

Code: AI030

Description: A place where tents or buildings serve as temporary residence for members of an organization.

AJ - Culture-Agriculture

Name: Circular Irrigation System

Code: AJ010

Description: An elevated irrigation system revolving around a central pivot point.

Name: Siphon

Code: AJ020

Description: Bent or curved tube so arranged that liquid flows up or down through it under the force of gravity.

Name: Feed Lot/Stockyard/Holding Pen

Code: AJ030

Description: An enclosed area in which livestock are temporarily kept.

Name: Windmill

Code: AJ050

Description: A wind-driven system of vanes attached to a tower like structure (excluding wind-generated power plants).

Name: Windmotor

Code: AJ051

Description: A modern structure used for wind power.

AK - Culture-Recreational

Name: Amusement Park Attraction

Code: AK020

Description: A large structure located in an Amusement Park.

Name: Amusement Park

Code: AK030

Description: A predominantly man-made facility equipped with recreational devices. (See also AK090 and AK120.)

Name: US-Athletic Field UK-Athletic Field/Sports Field/Playing Field

Code: AK040

Description: An open area where sporting events, exercises, or games occur.

Name: Tennis Court(s)

Code: AK050

Description: An area or site used for the sport of tennis.

Name: Campground/Campsite

Code: AK060

Description: A location for camping. (See also AI020 and AQ140.)

Name: Picnic Site

Code: AK061

Description: A parcel of land that has picnic tables for public use.

Name: US-Drive In Theater UK-Drive-in Theatre

Code: AK070

Description: A place where motion pictures are shown while viewers remain in their vehicles.

Name: US-Drive In Theater Screen UK-Drive-in Theatre Screen

Code: AK080

Description: A large outdoor screen for showing motion pictures.

Name: US-Fairgrounds UK-Fairground

Code: AK090

Description: An area where permanent facilities exist to hold outdoor fairs, circuses or exhibitions. (See also AK030 and AK120.)

Name: Exhibition Grounds

Code: AK091

Description: An area where permanent facilities exist to hold outdoor exhibitions. (See also AK030, AK090, and AK120.)

Name: Golf Course

Code: AK100

Description: An area of land laid out for the game of golf.

Name: Golf Driving Range

Code: AK101

Description: A parcel or tract of land used for practicing golf shots.

Name: Grandstand

Code: AK110

Description: A usually roofed structure for special viewing of events and having tiers of seats or standing room for spectators.

Name: Park

Code: AK120

Description: An area used for recreational or ornamental purposes. (See also AK030, AK090 and AL170.)

Name: Lookout

Code: AK121

Description: An area, generally an elevated place, with facilities for observing the scenery.

Name: US-Race Track UK-Race Track/Race Course

Code: AK130

Description: A course for racing.

Name: Ski Jump

Code: AK150

Description: A ramp used for ski jumping.

Name: Ski Track

Code: AK155

Description: A course prepared for skiing.

Name: US-Stadium/Amphitheater UK-Stadium/Ampitheatre

Code: AK160

Description: An arena for holding and viewing events.

Name: Swimming Pool

Code: AK170

Description: A constructed basin used for swimming outdoors.

Name: Zoo/Safari Park

Code: AK180

Description: An area with a collection of live animals usually for public display.

Name: Fishing Pier/Promenade Pier

Code: AK190

Description: A structure extending into the water used as a platform for recreational purposes, not intended as a berthing place for vessels.

AL - Culture-Miscellaneous Features

Name: Animal Sanctuary

Code: AL005

Description: A natural area set aside for the preservation and protection of wildlife.

Name: Archeological Site

Code: AL012

Description: A site or location where remains of ancient civilizations or human activity have been discovered. (See also AL200.)

Name: Building

Code: AL015

Description: A relatively permanent structure, roofed and usually walled and designed for some particular use. (See also AL100.)

Name: Building Superstructure Addition

Code: AL018

Description: A supplemental portion of a building which rises from the roof but is not considered to be part of the general roof line.

Name: Shed

Code: AL019

Description: A storage facility usually characterized by one or more open sides, support pillars and a roof.

Name: Built-Up Area

Code: AL020

Description: An area containing a concentration of buildings and other structures.

Name: Cairn

Code: AL025

Description: A heap of stones piled up as a memorial or a landmark. (See also AL090, and AL130.)

Name: US-Cemetery UK-Cemetery/Graveyard

Code: AL030

Description: An area of land for burying the dead.

Name: Cliff Dwelling

Code: AL040

Description: A dwelling built in the recesses of cliffs. (See also AL250.)

Name: Complex Outline

Code: AL045

Description: An outline delimiting an area in which two or more like features have the same function.

Name: US-Display Sign UK-Display Sign/Notice Board

Code: AL050

Description: An upright panel used to convey visual information. (See also AL080.)

Name: Dragon Teeth

Code: AL060

Description: Regularly spaced concrete or metal barriers laid in single or multiple rows to prevent vehicle movement.

Name: Fence

Code: AL070

Description: A man-made barrier of relatively light structure used as an enclosure or boundary. (See also AL260.)

Name: Flagstaff/Flagpole

Code: AL073

Description: A staff or pole on which a flag is raised.

Name: Gallery

Code: AL075

Description: A sunken or cut passageway along a transportation route in mountainous regions constructed to protect vehicles from the elements. A series of openings on one side may be present for light or ventilation.

Name: Gantry

Code: AL080

Description: A frame structure raised on side supports so as to span over or around something. (See also AL050.)

Name: US-Grave Marker UK-Grave Marker/Tombstone

Code: AL090

Description: A marker indicating an individual grave site. (See also AL025 and AL130.)

Name: Hut

Code: AL100

Description: A small simple or crude house or shelter. (See also AL015.)

Name: Cabin

Code: AL101

Description: A building in a remote or wilderness area.

Name: Settlement

Code: AL105

Description: A concentration of small dwellings.

Name: US-Light Standard/Light Support UK-Light Standard/Light Support/Lamp Post
Code: AL110

Description: A structure serving as a support for lighting.

Name: Calvary Cross
Code: AL116

Description: A structure, mounted on a pedestal, composed of an upright member with a shorter horizontal member centered at approximately two thirds of the height of the upright member.

Name: Missile Site
Code: AL120

Description: An area with related facilities for storing and launching missiles.

Name: US-Monument UK-Monument/Folly
Code: AL130

Description: A structure erected or maintained as a memorial to a person or event. (See also AL025 and AL090.)

Name: Native Settlement
Code: AL135

Description: A concentration of native dwellings, generally of the hut type, which are not usually of substantial construction.

Name: Particle Accelerator
Code: AL140

Description: An apparatus for imparting high velocities to charged particles.

Name: Telescope
Code: AL141

Description: An apparatus used for observing distant objects or phenomena.

Name: Overhead Obstruction Location
Code: AL155

Description: An undelineated obstruction location such as underpasses, overhead pipelines, building overhangs, and other covered traveled ways.

Name: Plaza/City Square
Code: AL170

Description: An open area which serves as a public square in a city or town. (See also AK120.)

Name: Ramp
Code: AL195

Description: An inclined plane usually man-made for moving between two levels. (See also BB240.)

Name: Ruins

Code: AL200

Description: The deteriorated remains of an unspecified structure. (See also AL012.)

Name: Historic Site/Point of Interest

Code: AL201

Description: Site or area declared to be of national or provincial historical significance or interest, maintained for the public.

Name: Snow Shed/Rock Shed

Code: AL210

Description: A shelter build to protect a section of road or railroad from snow/rock slides.

Name: US-Steeple UK-Steeple/Spire

Code: AL220

Description: A structure usually ending in a sharp point and which may be erected on a roof of a building.

Name: Tower (Non-Communication)

Code: AL240

Description: A relatively tall structure which may be used for observation, support, or storage, etc. (See also AF030, AM080, AQ060, and BI050.)

Name: Tower (General)

Code: AL241

Description: A relatively tall structure of undefined purpose.

Name: Underground Dwelling

Code: AL250

Description: Underground living quarters. (See also AL040.)

Name: Wall

Code: AL260

Description: A solid man-made barrier of heavy material used as an enclosure or boundary or for protection. (See also AL070.)

AM - Culture-Storage

Name: Depot (Storage)

Code: AM010

Description: An area used for the storage of products or supplies. (See also AB000.)

Name: Grain Bin/Silo

Code: AM020

Description: An enclosed container, used for storing grain or fodder.

Name: Grain Elevator

Code: AM030

Description: A tall structure, equipped for loading, unloading, processing and storing grain.

Name: Timber Yard

Code: AM031

Description: An open area for the storage of wooden lumber and timbers.

Name: US-Mineral Pile UK-Mineral Pile/Mineral Tip

Code: AM040

Description: A man-made heap of mining or quarrying products excluding waste materials. (See also AB000.)

Name: Storage Bunker/Storage Mound

Code: AM060

Description: A structure which may be covered or surrounded with earth which is resistant to ordnance where materials or products are stored. (See also AH050.)

Name: Tank

Code: AM070

Description: A container used for the storage of liquids or gases.

Name: Water Tower

Code: AM080

Description: An elevated container and its supporting structure used to hold water.

AN - Culture-Transportation-Railroad

Name: US-Railroad UK-Railway

Code: AN010

Description: A rail or set of parallel rails on which a train or tram runs.

Name: US-Railroad Siding/Railroad Spur UK-Railway Siding/Railway Spur

Code: AN050

Description: A stretch of railroad tracks connected to the main track by switch(es) - used for temporary storage and loading/unloading.

Name: Railroad Yard/Marshalling Yard

Code: AN060

Description: A system of tracks within defined limits, and associated features, provided for loading/unloading and assembling trains.

Name: Railhead

Code: AN065

Description: A location where materials can be loaded or unloaded from railroad wagons.

Name: US-Railroad Turntable UK-Railway Turntable

Code: AN075

Description: A rotating platform with railroad tracks used for turning locomotives or cars/carriages.

Name: US-Railroad Switch UK-Railroad Points

Code: AN080

Description: A location on a railroad at which rails may be switched to permit access to another line.

AP - Culture-Transportation-Road

Name: Cart Track

Code: AP010

Description: An unimproved roadway.

Name: US-Interchange UK-Interchange/Complex Junction

Code: AP020

Description: A connection designed to provide traffic access from one road to another.

Name: Road

Code: AP030

Description: An open way maintained for vehicular use.

Name: Gate

Code: AP040

Description: A barrier which controls passage to a road, railroad, tunnel, or bridge.

Name: Barrier

Code: AP041

Description: A permanent obstruction placed across a route to prevent vehicular traffic.

Name: US-Trail UK-Trail/Footpath

Code: AP050

Description: A path worn by the passage of people or animals.

Name: Drove

Code: AP060

Description: Wide track on the land's surface due to the regular movement of animal herds (e.g. sheep, cattle).

AQ - Culture-Associated Transportation

Name: US-Aerial Cableway Lines/Ski Lift Lines UK-Aerial Cableway Lines/Ski Lift Cables

Code: AQ010

Description: Cables which are strung between elevated supports as part of a conveyor system on which cars, buckets, or other carrier units are suspended. (See also AF020.)

Name: Aerial Cableway Pylon/Ski Pylon

Code: AQ020

Description: A tower supporting steel cables which convey cars, buckets, or other suspended carrier units.

Name: Mast

Code: AQ021

Description: A straight piece of timber or a hollow cylinder of wood or metal set up vertically, or nearly so.

Name: US-Boardwalk UK-Wooden Causeway

Code: AQ030

Description: A walkway made of wooden planks. (See also BB140.)

Name: Bridge/Overpass/Viaduct

Code: AQ040

Description: A man-made structure spanning and providing passage over a body of water, depression, or other obstacles.

Name: Bridge Span

Code: AQ045

Description: A section of the bridge deck between successive supports such as pillars, piers, or abutments.

Name: Bridge Superstructure

Code: AQ050

Description: Those elements of the bridge structure which are above the lowest deck. (See also AQ055)

Name: Bridge Tower/Bridge Pylon

Code: AQ055

Description: A tower or pylon from which a bridge's deck is suspended.

Name: Bridge Pier

Code: AQ056

Description: The support(s) in the form of pillar(s) or abutment(s) for the spans of a bridge.

Name: Constriction/Expansion

Code: AQ058

Description: A point where a passage way narrows or expands beyond its normal width.

Name: Control Tower

Code: AQ060

Description: A tower-like structure that houses the persons and equipment used to control the flow of air, rail, or marine traffic. (See also AL240.)

Name: US-Crossing UK - Crossing/Level Crossing

Code: AQ062

Description: A point where two or more line features intersect or cross at the same level about which information is required. (See also BH070.)

Name: Causeway

Code: AQ064

Description: A raised roadway of solid structure built primarily to provide a route across wet ground or intertidal area.

Name: Culvert

Code: AQ065

Description: A sewer or drain crossing under a road, track, or embankment, without affecting the construction of the crossed feature.

Name: Drop Gate/Rolling Block

Code: AQ068

Description: A massive assemblage of material, usually in the form of concrete logs or blocks, positioned alongside or above a transportation route, ready to be activated as a potential barrier to an advancing enemy ground force, when needed.

Name: Ferry Crossing

Code: AQ070

Description: A route in a body of water where a ferry crosses from one shoreline to another.

Name: US-Ferry Site UK-Ferry Station

Code: AQ080

Description: A point where a ferry takes on or discharges its load.

Name: Entrance/Exit

Code: AQ090

Description: A point of entrance or exit. (See also AA010 and AQ130.)

Name: US-Landmark Post/Distance Post UK-Landmark Post/Distance Post/Milestone

Code: AQ100

Description: A marker which designates the distance from a given point, or a location.

Name: Mooring Mast

Code: AQ110

Description: A tower-like structure used to secure an airship.

Name: Prepared Raft or Float Bridge Site

Code: AQ111

Description: Site on a river or canal which has a ramp, piling, and/or pier structures constructed on one or both shores to allow for suitable future crossing operations using float bridge or rafting equipment.

Name: Pipeline/Pipe

Code: AQ113

Description: A tube for the conveyance of solids, liquids or gases.

Name: Pumping Station

Code: AQ116

Description: A facility to move solids, liquids or gases by means of pressure or suction.

Name: US-Sharp Curve(s) UK-Sharp Bend(s)

Code: AQ118

Description: A curve which may cause transportation restrictions.

Name: Route Marker

Code: AQ119

Description: An emblem used to designate a road's name or identifying number.

Name: Steep Grade

Code: AQ120

Description: Location along any given traveled way where the percent (%) slope (ratio of change in elevation (vertical distance) to horizontal ground distance multiplied by 100) is high enough to slow, hinder, or even stop movement.

Name: Station (Miscellaneous)

Code: AQ125

Description: A stopping place for the transfer of passengers and/or freight.

Name: Tunnel

Code: AQ130

Description: An underground or underwater passage, open at both ends, and usually containing a road or railroad. (See also AQ090.)

Name: US-Vehicle Stopping Area/Rest Area UK-Vehicle Stopping Area/Rest Area/Lay By

Code: AQ135

Description: A roadside place usually having facilities for people and/or vehicles.

Name: US-Vehicle Storage/Parking Area UK-Vehicle Storage/Parking Area/Car Park/Boat Park

Code: AQ140

Description: An open land area used for storing or parking vehicles or vessels (including recreational vehicles). (See also AI020 and AK060.)

Name: Flight of Steps

Code: AQ150

Description: A series of steps or stairs reaching from one level to another.

AT - Culture-Communications/Transmission

Name: Cable

Code: AT005

Description: An insulated wire, or group of wires formed into one continuous strand, located underground or underwater. (See also AT030.)

Name: Overhead Cable

Code: AT006

Description: An insulated wire, or group of wires formed into one continuous strand and located above ground or above water surface. (See also AT030 and AT005.)

Name: US-Disk/Dish UK-Disk Aerial/Dish Aerial

Code: AT010

Description: A concave object used for transmitting or receiving electronic signals.

Name: Early Warning Radar Site

Code: AT020

Description: An installation utilizing long range radar to detect approaching aircraft or missiles.

Name: Power Transmission Line

Code: AT030

Description: A system of above ground wires including their supports, which transmits electricity over distance. (See also AT005.)

Name: US-Power Transmission Pylon UK-Power Transmission Pylon/Pole

Code: AT040

Description: A pylon or pole used to support a power transmission line.

Name: Telepheric

Code: AT041

Description: A construction of cables strung between elevated supports on which carrier units are suspended.

Name: Radar Transmitter

Code: AT045

Description: A device for transmitting and receiving radar emissions.

Name: Communication Building

Code: AT050

Description: A building in which communication signals are processed or controlled.

Name: Telephone Line/Telegraph Line

Code: AT060

Description: A system of above ground wires, including their supports which transmit electrical signals over distance.

Name: Telephone-Telegraph Pylon/Pole

Code: AT070

Description: A pylon or pole used to support a telephone or telegraph line.

Name: Communication Tower

Code: AT080

Description: A relatively tall structure used for transmitting and/or receiving electronic communication signals. (See also AQ060.)

B - Hydrography

BA - Hydrography-Coastal Hydrography

Name: Coastline/Shoreline

Code: BA010

Description: The line where a land mass is in contact with a body of water.

Name: Foreshore

Code: BA020

Description: That part of the shore or beach which lies between the low water mark and the coastline/shoreline. The same condition may exist in non-contiguous off-shore areas. (See also BA021, BA022, and BA023).

Name: Nearshore (Precise IHO)

Code: BA021

Description: Area between the 10 meter depth curve and the low water line defined by either Mean Low Water Springs (MLWS) or Mean Low Low Water (MLLW) as defined by the National Authority. (See also BA020, BA022, and BA023).

Name: Backshore (Precise IHO)

Code: BA022

Description: Area between the normal limit of wave action above either Mean High Water Springs (MHWS) or Mean High High Water (MHHW) as defined by the National Authority and the maximum limit of wave action. (See also BA020, BA021, and BA023).

Name: Foreshore (Precise IHO)

Code: BA023

Description: Area between the low water line defined by Mean Low Water Springs (MLWS) or Mean Low Low Water (MLLW) as appropriate and the normal limit of wave action above Mean High Water Springs (MHWS) or Mean High High Water (MHHW) as appropriate. (See also BA020, BA021, and BA022).

Name: Island

Code: BA030

Description: A land mass smaller than a continent and surrounded by water.

Name: Water (Except Inland)

Code: BA040

Description: An area of water which normally has tidal fluctuations.

Name: Beach

Code: BA050

Description: The shore of the sea or lake, sandy or pebbly, brought up by the waves (including the foreshore area). (See also BA020, BA021, BA022 and BA023.)

Name: Dyke Crown

Code: BA051

Description: A dyke (or dike) is an artificial embankment to contain or hold back water. The dyke crown is the topline of the dyke. (See also DB090.)

BB - Hydrography-Ports and Harbors

Name: US-Harbor UK-Harbour

Code: BB005

Description: A natural or artificial improved body of water providing protection for vessels and anchorage and docking facilities.

Name: US-Harbor Complex UK-Harbour Complex

Code: BB006

Description: Complex Feature with possible components: many simple features, and complex features BB011, BC099, BC098.

Name: Channel Edge

Code: BB007

Description: Complex Feature with possible components: BC099, BC098.

Name: Anchorage

Code: BB010

Description: An area of water where vessels anchor or may anchor.

Name: Anchorage (Complex Feature)

Code: BB011

Description: Complex Feature with possible components: BB010, BC099, BC098.

Name: Anchor Berth

Code: BB012

Description: A designated area of water where a single vessel, sea plane, oil rig, etc. is anchored or may anchor.

Name: Anchor

Code: BB019

Description: Device normally placed on the sea bottom and attached to a cable or rope used to position a vessel, boat, or any other floating structure.
Replaces old definition of "An anchor is a heavy forging usually comprising a shank with a large shackle or ring at one end and two arms, with palms at the other. Shaped as to grip the sea bottom, and by means of a cable or rope, it holds a vessel, boat, or any other floating structure in place."

Name: Berth

Code: BB020

Description: The place where a ship lies when secured to a pier, wharf, dolphin(s) or dock. It may be a designated place away from the coast line.

Name: Mooring Trot

Code: BB021

Description: Complex feature with possible components: BB019, BC098.

Name: Basin

Code: BB022

Description: An enclosure containing water for a dock for ships.

Name: Bollard

Code: BB030

Description: A post on a wharf used for fastening mooring lines.

Name: Breakwater/Groyne

Code: BB040

Description: A structure which protects a harbor or beach from forces of the sea. (See also BB140.)

Name: Breakwater

Code: BB041

Description: A structure which protects a shore area, harbor, anchorage, or basin from sea waves or swells by preventing them from reaching the protected area or reducing their magnitude. (See also BB140 and BB042.)

Name: Mole

Code: BB042

Description: A loading and discharge place for vessels. It is usually a substantial masonry structure, and often serves as a breakwater on its outer side while offering facilities for ships in its inner side.

Name: Groin

Code: BB043

Description: A structure which normally projects outward from a shoreline and which protects a beach from erosion by disrupting the longshore movement of sand and other sediments, not by preventing waves from reaching the shoreline. (See also BB140 and BB041.)

Name: Calling-In Point

Code: BB050

Description: A specified point some distance from the harbor at which a vessel's navigator notifies the harbor authority of his ship's position. (Note that this is not the same as GA055 Waypoint/Reporting-Calling In Point which is for aircraft only.)

Name: Mooring/Warping Facility

Code: BB079

Description: A structure used for mooring/warping a ship or as protection for harbor constructions.

Name: Dolphin

Code: BB080

Description: A post or group of posts used for mooring, warping a ship or as an aid to navigation.

Name: Shoreline Construction

Code: BB081

Description: A fixed (not afloat) artificial structure attached to the land. Shoreline constructions are normally used for berthing and protection.

Name: US-Drydock UK-Dry Dock

Code: BB090

Description: A structure, providing support for a vessel, which has a means of removing water so that the bottom of the vessel can be exposed.

Name: US-Fish Stakes UK-Fishing Stakes

Code: BB100

Description: Poles or stakes placed in shallow water to catch fish.

Name: US-Fishing Harbor UK-Fishing Harbour

Code: BB105

Description: A harbor which is primarily used by fishing vessels.

Name: Fish Traps/Fish Weirs

Code: BB110

Description: A fence or enclosure set in water to catch fish.

Name: Tunny (Tuna) Nets Area

Code: BB111

Description: An area where nets used for catching tunny (tuna) may be found.

Name: US-Gridiron UK-Gridiron/Careening Grid

Code: BB115

Description: A flat frame, usually of parallel timber baulks, erected on the foreshore so that a vessel may dry out on it for painting or repair at low water.

Name: US-Jetty UK-Training Wall

Code: BB140

Description: A man-made barrier built out into, or in the water, primarily to restrain or direct currents and waves. (See also AQ030 and BB040.)

Name: Landing Place

Code: BB150

Description: A place on shore where landing from the sea is possible.

Name: Landing Stairs

Code: BB151

Description: Steps at the shoreline as the connection between land and water on different levels.

Name: Maritime Station/Maritime Signal Station

Code: BB155

Description: A facility occupied by a governmental (maritime related) or harbor authority, providing specific services to vessels. A signal station is a structure (building, tower, mast, etc.), which conveys information visually from station to ship.

Name: Mooring Ring

Code: BB160

Description: A metal ring attached to a structure and used to secure a vessel.

Name: US-Offshore Loading Facility UK-Single Point Mooring

Code: BB170

Description: A facility located offshore for loading and unloading cargo.

Name: Oyster Bed/Mussel Bed

Code: BB180

Description: A place in shallow water where oysters and mussels breed and may be cultivated.

Name: US-Pier/Wharf/Quay UK-Pier/Wharf/Quay/Jetty

Code: BB190

Description: A structure primarily used as berthing places for vessels.

Name: Fender

Code: BB198

Description: A protective structure designed to cushion the impact of a vessel and prevent damage.

Name: Floating Dock

Code: BB199

Description: A dock which normally consists of a bottom pontoon, on which a ship can be lifted out of the water, and two side walls to give stability to the bottom pontoon.

Name: Pump Out Facility

Code: BB200

Description: A place on land to where ships can pump waste liquids.

Name: Small Craft Facility

Code: BB201

Description: An installation with a certain function or service generally of interest for small craft or pleasure boats.

Name: Ice Boom

Code: BB202

Description: Floating barriers, anchored to the bottom, used to deflect the path of floating ice in order to prevent the obstruction of locks, intakes, etc., and to prevent damage to bridge piers and other structures.

Name: Ramp (Maritime)

Code: BB220

Description: A partially submerged hard surfaced area on a shoreline for launching and retrieving vessels or vehicles.

Name: Rip Rap

Code: BB225

Description: A loose assemblage of broken stones or similar material erected in water or on soft ground as a foundation or to protect the underlying surface from erosion.

Name: Revetment (Shore Protection)

Code: BB226

Description: Facing of stone or other material placed along the edge of a stream, river or canal to stabilize the bank and to protect it from the erosive action of the stream.

Name: Seawall

Code: BB230

Description: A structure built to protect the shore from erosion.

Name: Slipway/Patent Slip

Code: BB240

Description: A prepared slope for launching and recovering vessels.

Name: Watering Place

Code: BB250

Description: A place where vessels can replenish their water supply.

BC - Hydrography-NAVAIDs

Name: Beacon

Code: BC010

Description: A fixed visual or electronic aid to navigation.

Name: Buoy

Code: BC020

Description: A floating object, other than a lightship, moored or anchored to the bottom and serving as an aid to navigation.

Name: Leading Light(s)

Code: BC030

Description: Two or more lights forming a leading line of a course to be followed.

Name: Navigation Line

Code: BC031

Description: A line generated by the straight line connection between two navigational aids, and which extends towards the area of navigational interest.

Name: Radar Line

Code: BC032

Description: Mid-channel lines corresponding to the lines in harbor radar displays.

Name: Radar Range

Code: BC033

Description: Indicates the coverage of a sea area by a radar surveillance station. Inside this area a vessel may request shore based radar assistance, particularly in poor visibility.

Name: Lights in Line

Code: BC035

Description: Lights marking area limits, cable alignment, alignments for anchoring, etc., not marking direction or course.

Name: Light

Code: BC040

Description: A specially constructed device which displays a luminous or lighted aid to navigation. (See also BC050.)

Name: Lighthouse

Code: BC050

Description: A distinctive structure exhibiting light(s) designed to serve as an aid to navigation. (See also BC040.)

Name: Marker

Code: BC055

Description: A colored (usually white) mark on a cliff, rock, wall, etc. which is a conspicuous landmark for marine navigation.

Name: Light Sector

Code: BC060

Description: A sector defined by bearings from seaward within which a light shows a specified character or color, or is obscured.

Name: Light Vessel/Lightship

Code: BC070

Description: A distinctively marked manned vessel anchored or moored at a defined point to serve as an aid to navigation.

Name: Perches/Stakes

Code: BC080

Description: A small marker used to identify channels or to mark dangers such as rocks, shoals, etc. (See also BD100 and BD140.)

Name: Navigational Mark, Afloat

Code: BC098

Description: Complex Feature with possible components made of many simple features only.

Name: Navigational Mark, Fixed

Code: BC099

Description: Complex feature with possible components made of many simple features only.

Name: Leading Line

Code: BC100

Description: A track which passes through one or more (usually two) clearly defined objects, along which a vessel can safely travel.

Name: Fog Signal

Code: BC101

Description: A warning signal transmitted by a vessel, or aid to navigation, during periods of low visibility. Also, the device producing such a signal.

Name: Direction of Lateral Buoyage

Code: BC102

Description: A point (symbol) placed in a dataset to indicate the direction defining a lateral buoyage system, such as the International Association of Lighthouse Authorities (IALA) Lateral System where the orientation is not otherwise discernable from the configuration of the shoreline and waterways due to limited geographic extent or other constraints.

BD - Hydrography-Dangers/Hazards

Name: US-Underwater Danger/Hazard UK-Underwater Danger

Code: BD000

Description: A known underwater object or area, known to be dangerous to surface navigation.

Name: Mine-Naval

Code: BD001

Description: An explosive device used in naval warfare located on or below the sea.

Name: Miscellaneous Underwater Feature

Code: BD005

Description: An object or area on the sea floor or underwater that is not identified by any other code in this specification. (Also see BD000.)

Name: Breakers

Code: BD010

Description: Waves which break over off-lying shoals or near the shore. (See also BD080.)

Name: Crib

Code: BD020

Description: A framework structure submerged or above water used to support pipelines, sewer lines, or outfalls.

Name: US-Discolored Water UK-Discoloured Water

Code: BD030

Description: An area of sea water having a color distinctly different from the surrounding water.

Name: Eddies

Code: BD040

Description: Circular movements of water running contrary to the main current.

Name: US-Foul Ground UK-Foul

Code: BD050

Description: A region of comparatively shallow water strewn with rocks, boulders, coral, wreckage, or other obstructions, making it unsuitable for anchoring, grounding, or ground fishing.

Name: Kelp/Seaweed

Code: BD060

Description: A large seaweed.

Name: Obstruction (Nautical)

Code: BD070

Description: A danger to navigation, the exact nature of which is not specified, or has not been determined.

Name: Log Boom/Booming Ground

Code: BD071

Description: A line of connected, floating timbers as across a river or enclosing a water area to keep logs ready for the sawmill from floating away; also, the enclosed area.

Name: Pontoon

Code: BD072

Description: A broad, flat-bottomed floating structure without sheer, rectangular in shape, resembling a barge.

Name: Oil Barrier

Code: BD073

Description: A construction to dam oil flow on water.

Name: Chain/Wire

Code: BD074

Description: A physical connection between two independent objects, e.g., between: anchor and mooring buoy; anchor and offshore platform; hulk and bollard on land.

Name: Fishing Facility

Code: BD079

Description: A tool in shallow water for fishing purposes which can be an obstruction to ships in general.

Name: Overfalls/Tide Rips

Code: BD080

Description: Short, breaking waves occurring when a current passes over a shoal or other submarine obstruction or meets a contrary current or wind. Tide rips occur when one or more of the currents are tidal. (See also BD010.)

Name: Pile/Piling/Post

Code: BD100

Description: A long, heavy timber or section of steel, concrete, etc., forced into the earth to serve as a support, as for a pier. (See also BC080 and BD140.)

Name: Platform

Code: BD110

Description: A flat surface raised above the sea, as a working stage for conducting offshore operations.

Name: Offshore Platform Site (cleared)

Code: BD111

Description: A structure placed in the sea and used for production loading and discharge or observation/research facilities.

Name: Production Installation

Code: BD112

Description: An installation for the exploitation of natural resources.

Name: Ledge

Code: BD119

Description: A narrow, flat surface or shelf, especially one that projects, as from a wall of rock.

Name: Reef

Code: BD120

Description: A rocky or coral elevation at or near enough to the surface of the sea to be a danger to surface navigation.

Name: Pingo

Code: BD121

Description: A cone or dome shaped mound or hill of peat or soil, usually with a core of ice. It is found in tundra regions and is produced by the pressure of water or ice accumulating underground and pushing upward.

Name: Rock

Code: BD130

Description: An isolated rocky formation or a single large stone above or below the water surface.

Name: US-Snags/Stumps UK-Snags/Submerged Stumps

Code: BD140

Description: A stem or a trunk of a tree below the surface of water. (See also BC080 and BD100.)

Name: Wreck

Code: BD180

Description: The ruined remains of a vessel.

Name: Hulk

Code: BD181

Description: A permanently moored ship.

Replaces "An unrigged hull condemned as unfit for the risks of the sea and used as a floating depot in a harbor or roadstead."

BE - Hydrography-Depth Information

Name: Depth Curve

Code: BE010

Description: A navigational safety line indicating that no sounding of a lesser depth exists seaward of the line, but greater depths may occur on the shallow side of the line.

Name: Depth Contour

Code: BE015

Description: A line connecting points of equal depth at and below the hydrographic datum.

Name: Depth Area

Code: BE019

Description: Water area containing soundings within a defined range of values permanently at or below sounding datum.

Name: Sounding

Code: BE020

Description: A measured water depth or spot depth which has been reduced to chart datum.

Name: Drying Line, Low Water Line-LWL

Code: BE021

Description: Delineates an area that covers and uncovers depending on the elevation of the surface above chart datum.

Name: Sand Line

Code: BE022

Description: Delineates an area of sand that covers and uncovers depending on the elevation of the surface above chart datum.

Name: Mud Line

Code: BE023

Description: Delineates an area of mud that covers and uncovers depending on the elevation of the surface above chart datum.

Name: Bottom Return

Code: BE029

Description: An object identified from the bottom background by side-scan sonar.

Name: Track Swath

Code: BE030

Description: Area of horizontal depth coverage recorded by SONAR array systems.

Name: Track Line

Code: BE040

Description: The path of travel with respect to the earth as drawn on the chart and including the sounding information collected along the line.

Name: Beach Profile

Code: BE050

Description: A representation of the three dimensional relief of the bottom along a line or series of connected lines and based on depth contours, soundings, and other measurements of the depth at or below the hydrographic datum.

BF - Hydrography-Bottom Features

Name: US-Bottom Characteristics UK-Quality of the Bottom

Code: BF010

Description: Designations used on surveys and charts to indicate the consistency, color, and classification of the sea floor, as determined by sampling methods.

Name: Bottom Feature

Code: BF011

Description: A significant configuration of underwater bottom topography.

BG - Hydrography-Tide and Current Information

Name: US-Current Flow UK-Current Flow/Tidal Stream Direction

Code: BG010

Description: The flow direction of a current.

Name: Tideway

Code: BG011

Description: A natural watercourse in intertidal areas where water flows during the ebb and flow.

Name: Water Turbulence

Code: BG012

Description: The disturbance of water caused by the interaction of any combination of waves, currents, eddies, tidal streams, wind, shoal patches and obstructions.

Name: Tide Gauge

Code: BG020

Description: An instrument for measuring the height of the tide.

Name: US-Tide Data Point UK-Tidal Stream Observation Station

Code: BG030

Description: Place for which tabulated tidal stream data are given.

Name: US-Current Diagram UK-Tidal Stream Diagram

Code: BG040

Description: A graph or chartlet showing the average speed of the flood and ebb currents at different periods of the current cycle.

BH - Hydrography-Inland Water

Name: Inland Water

Code: BH000

Description: Any known inland waterway body, such as: lake/pond, reservoir, river/stream, etc. requiring separation into individual features due to status/type grouping that is currently indeterminable.

Name: Aqueduct

Code: BH010

Description: A pipe or artificial channel designed to transport water from a remote source, usually by gravity. (See also BH110.)

Name: Bog

Code: BH015

Description: A poorly drained or periodically flooded area, excluding tidal waters, with soil rich in plant residue.

Name: Canal

Code: BH020

Description: A man-made or improved natural waterway used for transportation.

Name: Ditch

Code: BH030

Description: A channel constructed for the purpose of irrigation or drainage.

Name: Filtration Beds/Aeration Beds

Code: BH040

Description: An area containing layers of material used to filter or aerate water.

Name: Fish Hatchery/Fish Farm/Marine Farm

Code: BH050

Description: An enclosure of water used for the breeding and/or rearing of fish.

Name: Flume

Code: BH060

Description: An open, inclined channel which carries water for use in such operations as mining or logging.

Name: Ford

Code: BH070

Description: A shallow place in a body of water used as a crossing. (See also AQ062.)

Name: Fountain

Code: BH075

Description: An artificial spring with water.

Name: Hummock

Code: BH077

Description: An area of higher elevation within a swamp, bog, or marsh.

Name: Lake/Pond

Code: BH080

Description: A body of water surrounded by land. (See also BH130.)

Name: Land Subject to Inundation

Code: BH090

Description: An area periodically covered by flood water, excluding tidal waters. (See also BH095.)

Name: Flooded Area

Code: BH091

Description: Land subject to controlled inundation (i.e. flooded by the regulation of the level of water impounded by a dam or beaver dam), and is normally associated with permanently flooded areas in which trees are still standing. Also known as inundated land.

Name: Marsh/Swamp

Code: BH095

Description: A saturated area, at times covered with water, supporting vegetation which may include trees. (See also BH090.)

Name: Moat

Code: BH100

Description: A trench usually filled with water, that surrounds a body of land.

Name: Penstock

Code: BH110

Description: A pipeline or channel generally used by hydroelectric plants or water mills to transport water by gravity and under pressure. (See also BH010.)

Name: Underground Water/Phreatic Water

Code: BH115

Description: Water situated underground but reachable by wells.

Name: Rapids

Code: BH120

Description: A place in a stream or river where the current is swift and the surface is usually broken by boulders and rocks.

Name: Reservoir

Code: BH130

Description: A man-made enclosure or area formed for the storage of water. (See also BH080.)

Name: Rice Field

Code: BH135

Description: An area periodically covered with water used for growing rice.

Name: River/Stream

Code: BH140

Description: A natural flowing watercourse.

Name: River Bank

Code: BH141

Description: The limit line between the water area of a river and the area of land.

Name: River/Stream Vanishing Point

Code: BH145

Description: Point at which a river or stream passes into the ground.

Name: Salt Pan

Code: BH150

Description: A flat area of natural surface salt deposits.

Name: Salt Evaporator

Code: BH155

Description: Shallow pools, normally man-made, used for the natural evaporation of water for the collection of salt.

Name: Sebkha

Code: BH160

Description: A natural depression in arid or semi-arid regions whose bed is covered with salt encrusted clayey soil.

Name: Spillway

Code: BH165

Description: A passage for surplus water to run over or around a dam.

Name: Spring/Water Hole

Code: BH170

Description: A natural outflow of water from below the ground surface. (See also AA050 and BH075.)

Name: Trough

Code: BH175

Description: A man-made open water container for animal drinking.

Name: Waterfall

Code: BH180

Description: A vertical or nearly vertical descent of water.

Name: Lagoon/Reef Pool

Code: BH190

Description: Open body of water separated from the sea by a sand bank or coral reef.

Name: Miscellaneous Surface Drainage Feature

Code: BH200

Description: Surface drainage feature which is of a minor nature and which is not included in other feature codings in this specification.

Name: Inland Shoreline

Code: BH210

Description: The land-water boundary for all inland hydrographic features having shorelines, Lake/Pond (BH080), or Island (BA030).

Name: River Navigation Route

Code: BH501

Description: The route in a river suitable for the largest allowed vessels. (See also FC168.)

BI - Hydrography-Miscellaneous Inland Water

Name: Boat Lift

Code: BI005

Description: A mechanical device for lifting vessels between two levels other than a lock. (See also BI030.)

Name: Cistern

Code: BI010

Description: A man-made container used for collection or storage of rain water.

Name: Dam/Weir

Code: BI020

Description: A permanent barrier across a watercourse used to impound water or to control its flow. (See also BI040.)

Name: Lock

Code: BI030

Description: An enclosure with a pair or series of gates used for raising or lowering vessels as they pass from one water level to another. (See also BI005.)

Name: Sluice

Code: BI039

Description: An open, inclined conduit fitted with a gate (reference BI040 Sluice Gate) for regulating water flow and may be employed in mine ore washing operations.

Name: Sluice Gate

Code: BI040

Description: A gate used to regulate the flow of water. (See also BI020.)

Name: Gate (Nautical)

Code: BI041

Description: A structure that may be swung, drawn, or lowered to block an entrance or passageway.

Name: US-Caisson UK-Dry Dock Gate

Code: BI042

Description: The gate at the end of a drydock which excludes the water after pumping out the dock. The pumping engines are often located in the caisson.

Name: Flood Barrage

Code: BI043

Description: An artificial obstruction placed in a water course to increase the depth or to divert it.

Name: Water Intake Tower

Code: BI050

Description: A tower-like structure associated with a dam or water source and used for the intake of water.

Name: Fish Ladder

Code: BI060

Description: A series of ascending pools constructed to enable fish to swim upstream around or over a dam.

Name: Gauging Station

Code: BI070

Description: A device which monitors stream flow.

Name: Boat Turning Basin

Code: BI080

Description: A section of canal or navigable waterway in which a barge or other vessel can be turned.

BJ - Hydrography-Snow/Ice

Name: Moraine

Code: BJ020

Description: An accumulation of soil and stone debris deposited by a glacier.

Name: Glacier

Code: BJ030

Description: A large mass of snow and ice moving slowly down a slope or valley from above the snowline.

Name: Ice Cliff

Code: BJ040

Description: The vertical face of a glacier or ice shelf.

Name: Ice Peak/Nunatak

Code: BJ060

Description: A rocky peak projecting above a surrounding ice field that may be perpetually covered with ice.

Name: Ice Shelf

Code: BJ065

Description: A sheet of thick ice, with level or undulating surface, attached to the land but mostly afloat which is bounded on the seaward side by an Ice Cliff (BJ040).

Name: Pack Ice

Code: BJ070

Description: An area of ice formed by the drifting and crushing together of floating pieces of ice.

Name: Polar Ice

Code: BJ080

Description: The heaviest, thickest form of ice over land or water. (See also BJ100.)

Name: Snow Field/Ice Field

Code: BJ100

Description: A large area permanently covered by snow or ice over land or water. (See also BJ080.)

Name: Tundra

Code: BJ110

Description: A prairie-like region in the Arctic and Subarctic zones which sustains a growth of low vegetation.

BK - Hydrography-Oceanographic or Geophysical

Name: Acoustic Station

Code: BK010

Description: A device equipped for the collection of acoustic data.

Name: Magnetic Station

Code: BK020

Description: A device equipped for the collection of magnetic data.

C - Hypsography

CA - Hypsography-Relief Portrayal

Name: Contour Line (Land)

Code: CA010

Description: A line connecting points having the same vertical datum value.

Name: Ridge Line

Code: CA020

Description: A line representation of a ridge top.

Name: Valley Bottom Line

Code: CA025

Description: A line representation of the lowest part of a valley.

Name: Breakline

Code: CA026

Description: Line representing the demarcation of a sudden and significant change in the gradient of the terrain relief.

Name: Spot Elevation

Code: CA030

Description: A designated location with an elevation value relative to a vertical datum.

Name: Inland Water Elevation

Code: CA035

Description: A location with a generalized elevation value relative to a vertical datum associated with an inland, usually confined, water body.

Name: Contour Polygon (Land)

Code: CA040

Description: An arbitrary area outline created to establish elevation as polygons.

D - Physiography

DA - Physiography-Exposed Surface Materials

Name: Asphalt Lake

Code: DA005

Description: A natural pool of liquid asphalt.

Name: Alkali Flats

Code: DA006

Description: A sterile plain containing an excess of alkali usually occurring in the bottom of an under drained basin in an arid or semi-arid region. The ground may be soft and have low shearing and bearing strength, and a high organic content.

Name: Ground Surface Element

Code: DA010

Description: The surface soil characteristics of the earth.

Name: Barren Ground

Code: DA020

Description: Ground so disturbed as to have no identifiable coverage.

Name: Land Area

Code: DA030

Description: An area not permanently or temporarily covered by water.

Name: Land Region

Code: DA031

Description: An area of natural scenery on land. It is defined by its geographical characteristics and known by its proper name.

DB - Physiography-Landforms

Name: Bluff/Cliff/Escarpment

Code: DB010

Description: A steep, vertical, or overhanging face of rock or earth. (See also DB110.)

Name: Cave

Code: DB030

Description: A natural subterranean chamber or series of chambers open to the Earth's surface.

Name: Hill

Code: DB031

Description: A small, isolated elevation, smaller than a mountain.

Name: Crevice/Crevasse

Code: DB060

Description: A narrow fissure, crack, or rift in the Earth's surface, snow or ice.

Name: Cut

Code: DB070

Description: An excavation of the Earth's surface to provide passage for a road, railroad, canal, etc.

Name: Depression

Code: DB080

Description: A low area surrounded by higher ground.

Name: Embankment/Fill

Code: DB090

Description: A raised long mound of earth or other material. (See also BA051.)

Name: Esker

Code: DB100

Description: A long, narrow ridge of sand and gravel deposited by a glacial stream.

Name: Fault

Code: DB110

Description: A fracture in the Earth's crust with displacement on one side of the fracture relative to the other. (See also DB010.)

Name: Geothermal Feature

Code: DB115

Description: A terrain surface feature controlled by or derived from the heat of the Earth's interior.

Name: Miscellaneous Obstacle

Code: DB145

Description: Obstacle feature which is of a minor nature and which is not covered by another feature coding in this specification.

Name: Mountain Pass

Code: DB150

Description: A natural route through a low place in a mountain range.

Name: Rock Strata/Rock Formation

Code: DB160

Description: A visual topographic outcrop, layers or beds of rock.

Name: Sand Dune/Sand Hills

Code: DB170

Description: Ridges or hills of sand.

Name: Slope Category

Code: DB176

Description: An area enclosing a group of slope values falling within a set range.

Name: Volcano

Code: DB180

Description: A mountain or hill, often conical, formed around a vent in the earth's crust through which molten rock, ash, or gases are or have been expelled.

Name: Volcanic Dike

Code: DB190

Description: A steep ridge of igneous rock.

Name: US-Gully/Gorge UK-Gullies

Code: DB200

Description: A long, narrow, deep erosion with steep banks.

Name: US-Potential Landslide Area UK-Landslide/Scree

Code: DB210

Description: A mass of land, with a high potential of slipping down from a mountain, hill, etc.

Name: Landslide

Code: DB211

Description: The mass of earth or rock which has slipped down from a mountain or cliff.

Name: Undermined Land

Code: DB220

Description: Area undermined through mining activities that has already partly subsided or that is in the process of subsiding.

Name: Fan

Code: DB230

Description: A gently sloping fan shaped feature usually found near the lower termination of a canyon.

Name: Bottomline of Cliff

Code: DB500

Description: Bottomline of a steep slope.

Name: Topline of cliff

Code: DB501

Description: Topline of a steep slope.

E - Vegetation

EA - Vegetation-Cropland

Name: Cropland

Code: EA010

Description: An area that has been tilled for the planting of crops. (See also EA040, EA050, and EA055.)

Name: Hedgerow

Code: EA020

Description: A continuous growth of shrubbery planted as a fence, a boundary, or a wind break.

Name: Nursery

Code: EA030

Description: A place where shrubs, flowers, plants and trees are grown for transplanting, seed or grafting.

Name: Botanical Garden

Code: EA031

Description: A cultural area where plants and/or trees are displayed.

Name: Orchard/Plantation

Code: EA040

Description: An area covered by systematic plantings of trees which yield fruits, nuts or other products. (See also EA010, EA050 and EA055.)

Name: Vineyards

Code: EA050

Description: An area covered by the systematic planting of grape vines. (See also EA010, EA040 and EA055.)

Name: Hops

Code: EA055

Description: An area covered by the systematic planting of hop vines. (See also EA010, EA040 and EA050.)

EB - Vegetation-Rangeland

Name: Grassland

Code: EB010

Description: An area composed of uncultured plants which have little or no woody tissue.

Name: Grass/Scrub/Brush

Code: EB015

Description: Area composed of uncultured plants which may have some woody tissue.

Name: Scrub/Brush/Bush

Code: EB020

Description: Low-growing woody plants. (See also EC030.)

Name: Land Use/Land Cover (Vegetation)

Code: EB030

Description: Thematic classification of the predominant vegetation and land use characteristics of the land surface covers.

EC - Vegetation-Woodland

Name: Bamboo/Cane

Code: EC010

Description: Woody, treelike grass.

Name: Forest

Code: EC015

Description: An area set aside as a woodland or recreational preserve.

Name: Oasis

Code: EC020

Description: A small, isolated, fertile or green area in a desert region usually having a spring or well.

Name: Trees

Code: EC030

Description: Woody-perennial plants, having a self-supporting main stem or trunk. (See also EA040, EB020 and EC015.)

Name: US-Cleared Way/Cut Line/Firebreak UK-Cleared Way/Firebreak

Code: EC040

Description: A man-made clearing in a cultural area or through a stand of trees, designed to provide access for a road, railroad, pipeline, or power transmission line, or for boundary demarcation, survey line-of-sight, or to impede the progress of forest fires.

EE - Vegetation-Miscellaneous Features

Name: Miscellaneous Vegetation

Code: EE000

Description: A mixture of woody and non-woody vegetation types.

Name: Logging Area

Code: EE010

Description: An area of forest or vegetation being exploited for lumber resources.

Name: Land devoid of vegetation

Code: EE020

Description: Ground or land with little (less than 5 percent) or no vegetation.

F - Demarcation

FA - Demarcation-Boundaries/Limits/Zones (Topographic)

Name: Administrative Boundary

Code: FA000

Description: A line of demarcation between controlled areas.

Name: Administrative Area

Code: FA001

Description: An area controlled by administrative authority.

Name: Access Zone

Code: FA005

Description: A zone between a contact zone and the first possible clearing line (road, towing path, passable road bank crest). (See also FA041.)

Name: Firing Range/Gunnery Range

Code: FA015

Description: An open area designated for the purpose of discharging or detonating firearms.

Name: Armistice Line

Code: FA020

Description: A line established by opposing political groups as a result of cessation of hostilities.

Name: Cease-Fire Line

Code: FA030

Description: A line along which active hostilities are suspended.

Name: Claim Line

Code: FA040

Description: A limit of an area which is unilaterally claimed by one political group without consent or negotiation with another.

Name: Contact Zone

Code: FA041

Description: Terrain area 3 meters wide limited on the water side by the contact between land and water (under average level of water condition). (See also FA005.)

Name: Mandate Line/Convention Line

Code: FA050

Description: A line established to regulate matters between nations or groups over a specific area or territory.

Name: Defacto Boundary

Code: FA060

Description: An existing line of separation not officially recognized by various governments.

Name: Demilitarized Zone

Code: FA070

Description: An area where military activity is prohibited.

Name: National Park

Code: FA080

Description: Extensive area of a particular nature, that has been defined by law and that is to be protected as a whole. It meets the prerequisites of a nature reserve for the largest part and has been influenced by man at most only to a small extent .

Name: Nature Reserve

Code: FA081

Description: An area that has been legally defined and whose nature and landscape requires special protection, be it in part or as a whole, in order to preserve symbioses or biotypes of specific wildlife animals or plants, for scientific reasons or reasons of natural or geographic history, or because of their rareness, uniqueness or outstanding beauty.

Name: Protected Water, Gathering Ground

Code: FA082

Description: Protected area of water collection facilities with restricted use in order to protect the water above and under ground from being polluted.

Name: Geophysical Prospecting Grid

Code: FA090

Description: A grid established for the collection of geophysical data within an area.

Name: Test Area

Code: FA100

Description: Area for the testing of technical products.

Name: International Date Line

Code: FA110

Description: A line generally coinciding with the 180th meridian, modified to avoid land, and designated as the place where each calendar day begins.

Name: Training Area

Code: FA165

Description: An area reserved for training.

Name: Zone of Occupation

Code: FA170

Description: An area temporarily held and controlled by a foreign military force.

FC - Demarcation-Boundaries/Limits/Zones (Hydrographic)

Name: Maritime Limit Boundary

Code: FC021

Description: A line where on either side certain activities or factors of significance to navigation and/or operation apply.

Name: Maritime Area

Code: FC031

Description: An area in which certain activities or factors of significance to navigation and/or operation apply.

Name: Pond Partition

Code: FC035

Description: A structure separating the basins of a fish pond, a reservoir or a liquid waste pond.

Name: Restricted Area

Code: FC036

Description: An area in which certain aspects of navigation are restricted.

Name: Traffic Separation Scheme System

Code: FC040

Description: Complex feature with possible components made of many simple features and complex features BC099, BC098 and FC166.

Name: Traffic Separation Scheme (TSS)

Code: FC041

Description: A routing measure aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes.

Name: Measured Distance Line

Code: FC100

Description: A course whose length has been accurately measured and is used in conjunction with ranges ashore. It is used by vessels to calibrate logs, engine revolution counters, etc., and determine speed.

Name: Theodolite Line

Code: FC101

Description: Lines of known bearing from fixed geographic locations. Used to determine accurate positions of a vessel on certain test ranges.

Name: Range Centerline

Code: FC102

Description: A surveyed reference track marking the center of a test range. Vessels undergoing testing must maintain position along this track.

Name: Radar Reference Line

Code: FC130

Description: A line shown on a chart in proximity to a shipping route, along which ships are guided by a traffic control center located in a radar station. (See also BC032.)

Name: Route (Maritime)

Code: FC165

Description: A track or lane established for the safe passage of ships.

Name: Deep Water Route

Code: FC166

Description: Complex Feature with possible components: FC165 & RTT098, FC165 & RTT099, BC099, BC098.

Name: Defined Water

Code: FC167

Description: Complex Feature with possible components: FC165 & RTT008, FC165 & RTT012, AT060 & STA032, AT050 & STA033, GA055, BB011, BC099, BC098, and BB007.

Name: Canal Route

Code: FC168

Description: A navigable channel in lakes or other waterways.

Name: Safety Fairway

Code: FC170

Description: A route established for the safe passage of vessels through offshore oil and gas fields and minefields.

Name: Swept Area

Code: FC177

Description: An area that has been determined to be clear of navigational dangers to a specified depth. Replaces old definition of "An area of water cleared by a wire drag to ensure an area is free of navigational dangers."

G - Aeronautical Information

GA - Aeronautical Information-Air Routes

Name: Airspace

Code: GA005

Description: Designated airspace within which some or all aircraft may be subjected to air traffic control.

Name: ATS Route Segment/Leg

Code: GA010

Description: A portion of an Air Traffic Service (ATS) Route identified by two electronic NAVAIDS at the extremities and/or reporting points.

Name: Special Use Airspace

Code: GA015

Description: Airspace of defined dimension identified by area on Earth's surface where activities must be confined because of their nature and/or where limitations may be imposed on aircraft operations not associated with those activities.

Name: Airspace Boundary Segment

Code: GA020

Description: Single segment of an airspace (GA005).

Name: Special Use Airspace Segment

Code: GA025

Description: Single segment of a Special Use Airspace (GA015).

Name: Off Route Radial/Bearing

Code: GA030

Description: Captures the Off Route Radials/Bearings (directions and distance from a NAVAID to a Waypoint).

Name: Lead Radial

Code: GA031

Description: A radial or bearing which provides at least 2 miles of lead to assist in turning onto the intermediate portion of an instrument approach when the angle of intercept is greater than 90 degrees.

Name: NAVAIDS (Aeronautical)

Code: GA035

Description: Any visual or electronic device which provides point-to-point guidance information or position data.

Name: Route (Air)

Code: GA045

Description: A specific route designated for channeling the flow or traffic as necessary for the provision of air traffic services.

Name: Complex Terminal Route

Code: GA047

Description: Definition of route segments, action points, and various approach minimum altitudes and distances from the end of landing runway as functions of aircraft type and instrument approach procedures.

Name: Waypoint/Reporting-Calling In Point

Code: GA055

Description: A predetermined geographical position, used for route instrument approach definition or progress reporting purposes or to change frequency etc.

Name: Air Warning Light

Code: GA065

Description: A light or lights marking an obstacle which constitutes a danger to air navigation.

GB - Aeronautical Information-Aerodrome

Name: US-Airport/Airfield UK-Airport/Airfield/Airstrip

Code: GB005

Description: A defined area of land or water used for landing, take-off, and movement of aircraft including associated buildings and facilities.

Name: US-Airfield UK-Airstrip

Code: GB006

Description: A land aerodrome with limited facilities.

Name: Airport Area

Code: GB007

Description: A tract of land used for landing, take-off, and movement of aircraft not including associated buildings, runways and other facilities.

Name: Airport Lighting

Code: GB010

Description: Lights used to: define and outline perimeters, runways, taxiways, etc.; guide aircraft while on the ground, and to provide guidance to aircraft on approach for landing.

Name: US-Apron/Hardstand UK-Apron/Hardstanding

Code: GB015

Description: A defined paved or hard-packed area at an airport or heliport intended for aircraft parking.

Name: Arresting Gear

Code: GB020

Description: Devices such as cables or barriers that can be used to stop an aircraft immediately upon landing.

Name: Blast Barrier

Code: GB025

Description: A barrier used to divert or dissipate jet or propeller blast.

Name: Helicopter Landing Pad

Code: GB030

Description: An improved area used for take-off, and landing, by helicopters and other vertical take-off and landing aircraft.

Name: Heliport

Code: GB035

Description: A place designated for the landing and take-off of helicopters, including its buildings and facilities.

Name: Launch Pad

Code: GB040

Description: A designated area or structure from which a rocket or missile is launched.

Name: Overrun/Stopway

Code: GB045

Description: An area beyond the take-off runway designated as able to support an airplane during an aborted take-off.

Name: Revetment (Airfield/Equipment/Facilities)

Code: GB050

Description: A barricade which protects an aircraft, equipment, or facilities from hostile action.

Name: Runway

Code: GB055

Description: A defined area, usually rectangular, used for the conventional landing and take-off of aircraft. (Excludes GB045.)

Name: Shoulder

Code: GB057

Description: Adjacent area along either side of a road or runway not normally used by vehicles or aircraft, but provided as an allowable margin in case of emergency situations.

Name: Runway Radar Reflector

Code: GB060

Description: A device, normally placed near the threshold of a runway, used for reflecting radar signals.

Name: Seaplane Base

Code: GB065

Description: An installation supporting aircraft capable of taking off and landing on water.

Name: Seaplane Landing/Seaplane Take-Off Area

Code: GB070

Description: A designated portion of water outlined by visual surface markings, used by seaplanes to land and take off.

Name: Taxiway

Code: GB075

Description: A prepared surface providing access to/from runways and the aircraft parking area, terminal area, or service area, etc.

Name: US-Wind Indicator UK-Wind Indicator/Wind Sock

Code: GB080

Description: A visual device used to provide wind information.

Name: Decontamination Pad

Code: GB160

Description: A designated area where a Nuclear, Biological, or Chemical (NBC) contaminated aircraft, checked at landing, is sent to be decontaminated by special teams.

Name: INS Alignment Pad

Code: GB170

Description: A designated area where the automated navigation instruments of aircraft are reset before taking off.

Name: Air Obstruction

Code: GB220

Description: An existing object of natural growth, or terrain at a fixed location within prescribed area with a reference to which vertical clearance is or must be provided during flight operations.

Name: Miscellaneous Air Obstruction

Code: GB221

Description: A generic man-made air obstruction.

I - Cadastral

IA - Cadastral-Areas

Name: Map Boundary

Code: IA010

Description: A line which encloses all water, streets, parcels and buildings.

Name: Parcel

Code: IA040

Description: Land use and/or land property.

Name: Cadastral Constructions

Code: IA050

Description: Constructions with unique characteristics.

ID - Cadastral-Reference Points

Name: Cadastral Control Points

Code: ID010

Description: A reference point used for a cadastral map orientation.

Name: Fiducial Points

Code: ID020

Description: Used for topographic survey.

IE - Cadastral-Special Characteristics

Name: Map Sheet Frame

Code: IE010

Description: Contains drawing frames and map parameters.

Name: Miscellaneous

Code: IE020

Description: Contains topographical details and other information.

Name: Map-Info

Code: IE040

Description: Contains auxiliary information about each map.

S - Special Use (Dataset Specific)

SA - Terrain Analysis Dataset

Name: Common Open Water

Code: SA010

Description: An area containing any surface water that is flowing or free standing such as lakes, rivers, oceans, reservoirs, etc.

Name: Disturbed Soil

Code: SA020

Description: An area that has been so disturbed by human activity that no single soil type can be accurately identified. These areas may include built-up areas, strip mines, landfills, railroad yards, etc.

Name: Exposed Bedrock

Code: SA030

Description: Areas that contain no or little soil (less than 10%) containing bare rock or other extrusive material such as lava.

Name: Permanent Snowfield

Code: SA040

Description: An area permanently covered by snow or ice that covers a land mass, such as glaciers and snowfields.

Name: Slope Polygon

Code: SA050

Description: An area enclosing a group of slope values falling within a set range.

Name: Covered Drainage

Code: SA060

Description: A natural watercourse or man-made waterway that is covered preventing its observation or further classification.

SU - Dataset Development

Name: Military Base

Code: SU001

Description: A center of operations for a military organization.

Name: US-Subway UK-Underground Railway/Metro

Code: SU002

Description: An underground, metropolitan electric railway or the tunnel through which it travels.

Name: Port Facility

Code: SU003

Description: A building or section of building that is established to serve a particular purpose for water vehicles.

Z - General

ZB - General-Control Points

Name: Benchmark

Code: ZB020

Description: A reference mark on a permanent object indicating elevation relative to an established datum.

Name: US-Boundary Monument UK-Boundary Monument/Boundary Mark

Code: ZB030

Description: A marker identifying the location of a surveyed boundary line.

Name: Control Point/Control Station

Code: ZB035

Description: An object or mark on the ground of known position, elevation, or both.

Name: Distance Mark

Code: ZB036

Description: A mark which indicates the value of distance measured from an origin and consists of either a solid visible structure or a distinct location without special installation.

Name: Diagnostic Point

Code: ZB040

Description: A point used to check system accuracy.

Name: Geodetic Point

Code: ZB060

Description: A physical point on the Earth's surface having a surveyed position (e.g. Trig Points).

ZC - General-Magnetic Variation

Name: US-Magnetic Disturbance Area UK-Local Magnetic Anomaly

Code: ZC040

Description: A localized anomaly in the Earth's magnetic field.

Name: Isogonic Lines

Code: ZC050

Description: Lines connecting points of equal magnetic variation.

Name: Magnetic Pole

Code: ZC051

Description: Either of the two places on the Earth's surface where the magnetic dip is 90 degrees.

ZD - General-Miscellaneous

Name: Network

Code: ZD001

Description: A system of inter-connected real world objects of the same type or directly related types.

Name: Artifact Location

Code: ZD003

Description: An indicator which identifies incomplete or illogical data at a specific location (node), used for data processing only.

Name: Geographic Information Point

Code: ZD012

Description: A location where geographic information or statistics may apply.

Name: Point of Change

Code: ZD015

Description: The location/position on a linear feature where the characteristics of the feature change significantly.

Name: Void Collection Area

Code: ZD020

Description: An area lacking suitable source coverage, or where data is not required.

Name: Named Location

Code: ZD040

Description: A geographic place on the earth, not normally appearing as a feature on a map, but having a name that is required to be placed on a map.

Name: Text Description

Code: ZD045

Description: An area in which a characteristic or an activity pertaining to the area can be described and possibly labeled on a product if deemed important at the time the product is being produced.

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Annex A-Feature Definition

ANNEX B - ATTRIBUTE AND VALUE CODES

Name: Absolute Horizontal Accuracy

Code: AAH

Definition: Absolute horizontal accuracy integer value used in the ISO 8211 encapsulation. Units shall be described by reading the UNIAah field.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Short Integer	-32767 to 32767	1 Unit	N/A

Name: Absolute Vertical Accuracy

Code: AAV

Definition: Absolute vertical accuracy integer value used in the ISO 8211 encapsulation. Units shall be described by reading the UNIAav field.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Short Integer	-32767 to 32767	1 Unit	N/A

Name: Accuracy Category

Code: ACC

Definition: Accuracy of geographic position.

Domain: Enumerated

ACC 0	Unknown
ACC 1	Accurate
ACC 2	Approximate
ACC 3	Doubtful
ACC 5	Disputed
ACC 6	Undisputed
ACC 7	Precise
ACC 8	Abrogated
ACC 997	Unpopulated
ACC 998	Not Applicable
ACC 999	Other

Name: Available Facilities

Code: AFA

Definition: Facilities available at or in the near vicinity.

Domain: Enumerated

AFA 0	Unknown
AFA 1	Visitors Berth
AFA 2	Visitors Mooring
AFA 3	Sailmaker

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Annex B-Attribute and Value Codes

AFA	4	Chandler
AFA	5	Provisions
AFA	6	Physician/Doctor
AFA	7	Pharmacy/Chemist
AFA	8	Drinking Water
AFA	9	Fuel Station
AFA	10	Electricity
AFA	11	Bottle Gas/LPG
AFA	12	Showers
AFA	13	Launderette
AFA	14	Toilets
AFA	15	Post Box
AFA	16	Public Telephone
AFA	17	Refuse Bin
AFA	18	Water Police
AFA	19	Helipad
AFA	20	Ticket Sales
AFA	21	No Ticket Sales
AFA	22	Yacht Club
AFA	23	Boat Hoist
AFA	24	Boat Yard
AFA	25	Hotel Accommodation
AFA	26	Restaurant
AFA	27	Desalination facilities
AFA	28	Parking Lot
AFA	29	Parking for boats and trailers
AFA	30	Recreational Vehicle Park
AFA	31	Campground
AFA	32	Sewerage pump-out station
AFA	33	Emergency telephone
AFA	34	Landing and launching place for boats
AFA	35	Scrubbing Berth
AFA	36	Picnic Area
AFA	995	None
AFA	997	Unpopulated
AFA	998	Not Applicable
AFA	999	Other

Name: Arresting Gear Category

Code: AGC

Definition: Device used to stop an uncontrolled aircraft at the end of a runway.

Domain: Enumerated

AGC	0	Unknown
AGC	1	Net
AGC	2	Cable

- AGC 6 Jet Barrier
- AGC 997 Unpopulated
- AGC 998 Not Applicable
- AGC 999 Other

Name: Absolute Horizontal Accuracy in Meters

Code: AHA

Definition: The difference between the recorded horizontal coordinates of features and their true positions expressed as a circular error at 90% probability.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Associated Hydrographic Category

Code: AHC

Definition: The annual water content of the associated hydrographic feature as defined by the Inland Shoreline.

Domain: Enumerated

- AHC 0 Unknown
- AHC 1 Perennial
- AHC 2 Intermittent
- AHC 3 Ephemeral
- AHC 997 Unpopulated
- AHC 998 Not Applicable
- AHC 999 Other

Name: Accuracy of Obstruction Height Above Ground Level

Code: AHO

Definition: Indicates the difference between the recorded heights above ground level of features and their true heights at 90% probability.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	1 M	N/A

Name: Airspace Identification Attribute

Code: AIA

Definition: A set of characters which enables an individual airspace to be uniquely identified.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	15 Characters

Name: Aircraft Load Class

Code: ALC

Definition: A description of any load restrictions which apply to aircraft using a facility.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Air route segments Length

Code: ALN

Definition: Length, in nautical miles, of individual air route segments.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Angle of Orientation

Code: AOO

Definition: The angular distance measured from true north (0 deg) clockwise to the major axis of the feature. If the feature is square, the axis 0 through 89 deg shall be recorded. If the feature is circular, 360 deg shall be recorded.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 360	1 DEG	N/A

Name: Airfield Type

Code: APT

Definition: Unique airfield type.

Domain: Enumerated

APT	0	Unknown
APT	1	Major Airfield
APT	2	Minor Airfield
APT	3	Light/General Aviation Aircraft Operating Only
APT	4	Seaplane Base
APT	5	Glider Site
APT	6	Microlight/Ultralight Site
APT	7	Hang Glider Site
APT	8	Winch Launched Hang Glider Site
APT	9	Heliport
APT	10	Helicopter Site
APT	11	Heliport at Hospitals
APT	12	Emergency

APT 13 Parascending/Parasailing Site
 APT 14 Airport/Airfield
 APT 15 Undefined Landing Area
 APT 997 Unpopulated
 APT 998 Not Applicable
 APT 999 Other

Name: Area Coverage Attribute

Code: ARA

Definition: The absolute area within the delineation of the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Sq. Meters	Short Integer	0 to 32767	1 M2	N/A

Name: Area with greater precision.

Code: ARE

Definition: The absolute area within the delineation of the feature measured with greater precision and range.
 (See also ARA).

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Sq. Meters	Floating Point	N/A	0.01 M2	N/A

Name: Area Coverage Attribute Hectares

Code: ARH

Definition: The absolute area within the delineation of the feature in hectares.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Hectares	Short Integer	-32767 to 32767	1 HA	N/A

Name: Angle of Radar Reflector

Code: ARR

Definition: If DIR = 3 then ARR is the angular distance measured from true north (0 deg) clockwise to the reflective side of the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 360	1 DEG	N/A

Name: Aqueduct Type Category

Code: ATC

Definition: Type of aqueduct.

Domain: Enumerated

ATC	0	Unknown
ATC	1	Qanat/Kanat/Karez Shaft
ATC	2	VALUE INTENTIONALLY LEFT BLANK (Other)
ATC	3	Underground Aqueduct
ATC	997	Unpopulated
ATC	998	Not Applicable
ATC	999	Other

Name: ATS Route Level

Code: ATL

Definition: Defines the ATS Route Structure of which this route is effective.

Domain: Enumerated

ATL	0	Unknown
ATL	1	Both
ATL	2	High Level (FL195)
ATL	3	Low Level (FL195)
ATL	4	Night Low Flying
ATL	997	Unpopulated
ATL	998	Not Applicable
ATL	999	Other

Name: Aids to Navigation

Code: ATN

Definition: Indicates whether a feature is marked or unmarked by an aid to navigation.

Domain: Enumerated

ATN	0	Unknown
ATN	1	Marked
ATN	2	Unmarked
ATN	3	Lit
ATN	4	Unlit
ATN	997	Unpopulated
ATN	998	Not Applicable
ATN	999	Other

Name: ATS Use Attribute

Code: AUA

Definition: The particular use of the designated airspace.

Domain: Enumerated

AUA	0	Unknown
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AUA 1	Advisory Area (ADA)
AUA 2	Air Defense Identification Zone (ADIZ)
AUA 3	Air Route Traffic Control Center (ARTCC)
AUA 4	Alert Area
AUA 5	Area Control Center (ACC)
AUA 6	Buffer Zone (BZ)
AUA 7	Canadian Air Defense Identification Zone (CADIZ)
AUA 8	Control Area (CTA)
AUA 9	Control Zone (CTLZ)
AUA 10	Danger Area
AUA 11	Dew East Military Identification Zone (DEMIZ)
AUA 12	Distant Early Warning Identification Zone (DEWIZ)
AUA 13	Flight Information Region (FIR)
AUA 14	French Peripheral Identification Zone (LIP)
AUA 15	Military Aerodrome Traffic Zone (MAIZ)
AUA 16	Military Common Area Control (MCAC)
AUA 17	Military Climb Corridor (MCC)
AUA 18	Military Flying Area (Canada, MFA)
AUA 19	Mid-Canada Identification Zone (MIDIZ)
AUA 20	Military Operations Area (MOA)
AUA 21	Military Terminal Control Area (MTCA)
AUA 22	Military Upper Control Area (MUCA)
AUA 23	Oceanic Control Area (non-FAA) (OCA)
AUA 24	Operating Area (OPAREA)
AUA 25	Prohibited Area
AUA 26	Positive Control Area (PCA)
AUA 27	Positive Control Zone (PCZ)
AUA 28	Radar Area
AUA 29	Restricted Area
AUA 30	Security Identification Zone (SIZ)
AUA 31	Special Air Traffic Rules Area
AUA 32	Special Rules Zone
AUA 33	Transition Area (For Chart Use Only - TA)
AUA 34	Terminal Control Area (TCA)
AUA 35	Continental Control Area (CCA)
AUA 36	Special Operations Area (Air)
AUA 37	Terminal Radar Service Area (TRSA)
AUA 38	Upper Advisory Area (UDA)
AUA 39	Upper Control Area (UTA)
AUA 40	Upper Flight Information Region (UIR)
AUA 41	Warning Area
AUA 42	Zone of Interior (ZI)
AUA 43	VALUE INTENTIONALLY LEFT BLANK
AUA 44	Korea Limited Identification Zone (KLIZ)
AUA 45	Uncontrolled Airspace

AUA 46	Controlled Airspace
AUA 47	Airport Traffic Area (ATA)
AUA 48	Airport Radar Service Area (ARSA)
AUA 49	Controlled Firing Area
AUA 50	Parachute Jump Area
AUA 51	Airport Advisory Area
AUA 52	Designated Mountainous Area
AUA 54	Non-Free Flying Area
AUA 55	Control Zone - No Fixed Wing Special VFR Permitted
AUA 56	Altimeter Change Boundary
AUA 57	Defense Area
AUA 58	Aerodrome Control Zone
AUA 59	Class C Control Zone
AUA 60	Sparsely Settled Area
AUA 62	ICAO
AUA 63	Upper Airspace Centers Operational Air Traffic
AUA 64	Controlled Visual Flight Rules (CVFR)
AUA 65	Bird Hazard Areas
AUA 66	Temporary Reserved Airspace (TRA)
AUA 67	Air Route Traffic Control Center Sector or Discrete
AUA 68	Sub-Flight Information Region (SUB FIR)
AUA 69	Radar Area Sector Boundary
AUA 70	Oceanic Control Area (FAA) (OCA)
AUA 74	Refueling/Track Area
AUA 75	Berlin Control Zone
AUA 76	Helicopter Protection Area
AUA 77	Traffic Information Zone
AUA 78	Low Flying Area
AUA 79	Special Use Airspace Exclusions
AUA 997	Unpopulated
AUA 998	Not Applicable
AUA 999	Other

Name: Airspace Use Boundary

Code: AUB

Definition: Designated airspace within which some or all aircraft may be subject to air traffic control.

Domain: Enumerated

AUB 0	Unknown
AUB 1	Flight Information Region (FIR)
AUB 2	Sub-FIR
AUB 3	Control Zone (CTZ/CTR)
AUB 4	Military CTZ/CTR
AUB 5	VALUE INTENTIONALLY LEFT BLANK
AUB 6	Special Rules Zone (SRZ)
AUB 7	Advisory Area (ADA)

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Annex B-Attribute and Value Codes

AUB 8	Terminal Control Area (TCA)/Military TCA (MTMA)
AUB 9	VALUE INTENTIONALLY LEFT BLANK
AUB 10	Military Climb Corridor
AUB 11	Altimetric Setting Region (ASR)
AUB 12	Designated Mountainous Area
AUB 13	Area Control Center (ACC)
AUB 14	Radar Area
AUB 15	Radar Area Sector Boundary
AUB 16	Radar Service Area
AUB 17	Terminal Radar Service Area (TRSA)
AUB 18	Transition Area (TA)
AUB 19	Upper Information Region (UIR)
AUB 20	Upper Control Area
AUB 21	Military Upper
AUB 22	Upper Advisory Area (UDA)
AUB 23	Control Area (CTA)
AUB 24	Special Rules Area
AUB 25	Mandatory Radar Service Area
AUB 26	Training Airspace
AUB 27	Air-to-Air Refueling Area/Track/Route
AUB 28	Continental Control Area (CCA)
AUB 29	Oceanic Control Area (non-FAA) (OCA)
AUB 30	Oceanic Control Area (FAA) (OCA)
AUB 31	Upper Airspace Centers Operational Air Traffic
AUB 32	Air Defense Identification Zone (ADIZ)
AUB 33	Buffer Zone
AUB 34	Distant Early Warning Military Identification Zone (DEWMIZ)
AUB 35	DEW Identification Zone (DEWIZ)
AUB 36	French Peripheral Identification Zone (LIP)
AUB 37	Canadian Air Defense Identification Zone (CADIZ)
AUB 38	Mid-Canada Identification Zone (MIDIZ)
AUB 39	Security Identification Zone (SIZ)
AUB 40	Zone of Interior
AUB 41	Korea Limited Identification Zone
AUB 42	VALUE INTENTIONALLY LEFT BLANK
AUB 43	Aerodrome Traffic Zone (ATZ)
AUB 44	Aerodrome Control Zone
AUB 45	Military ATZ
AUB 46	Airport Radar Service Area (ARSA)
AUB 47	Airport Advisory Area
AUB 48	Uncontrolled Airspace
AUB 49	Controlled Airspace
AUB 50	Controlled Visual Flight Rules (CVFR)
AUB 51	Positive Control Area (PCA)
AUB 52	Positive Control Zone (PCZ)

AUB 53	Mandatory Radio Area
AUB 54	Special Access Lane Entry
AUB 55	Special Access Lane Exit
AUB 56	Flight Information Center (FIC)/Flight Service Station (FSS)
AUB 57	Military Sector Control Center (SCC-AM)
AUB 58	Air Route Traffic Control Center (ARTCC)
AUB 59	ARTCC Sector Discrete
AUB 60	VFR Sector Boundary
AUB 61	Military Common Area Control (MCAC)
AUB 62	Traffic Information Zone
AUB 63	Low Flying Area (LFA)
AUB 64	LFA Sub-Boundary
AUB 65	Low Flying Tactical Training Area (TTA)
AUB 66	Low Flying Tactical Route Boundary
AUB 67	Low Flying Flow Arrow
AUB 68	Low Flying Dividing Line
AUB 69	Low Flying Flow Corridor Boundary
AUB 70	Low Flying Dedicated User Area
AUB 71	Low Flying Weather Corridor
AUB 72	Maximum Elevation Figure
AUB 997	Unpopulated
AUB 998	Not Applicable
AUB 999	Other

Name: Airspace Use Limitations

Code: AUL

Definition: Airspace wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations.

Domain: Enumerated

AUL 0	Unknown
AUL 1	Danger Area
AUL 2	Prohibited Area
AUL 3	Restricted Area
AUL 4	Prohibited VFR
AUL 5	Alert Area
AUL 6	Warning Area
AUL 7	Defense Area
AUL 8	Controlled Firing Area
AUL 9	Temporary Reserved Airspace (TRA)
AUL 10	Parachute Drop Zone
AUL 11	Hazard to Aircraft
AUL 12	Gas Venting Station
AUL 13	Town to be Avoided
AUL 14	Nature Reserves, Parks, Conservation Areas
AUL 15	Helicopter Protection

AUL	16	Air Exercise Area
AUL	17	Area of Intense Air Activity
AUL	18	Bird Sanctuary
AUL	19	Bird Hazard Area
AUL	20	Industrial Hazards/Object needing protection
AUL	21	Health Resorts/Medical Establishments
AUL	22	Low Flying Avoidance Area
AUL	23	Mink Farm
AUL	24	Low Flying Tactical Training Avoidances
AUL	25	Low Flying Dedicated User Area
AUL	26	Area of Intensive Microlight/Ultralight Flying
AUL	27	Provost Marshal
AUL	28	Military Operating Area (MOA)
AUL	29	High Intensity Radio Transmission Area (HIRTA)
AUL	30	Military Flying Area (MFA)
AUL	31	Operating Area (OPAREA)
AUL	32	Non-free Flying Area
AUL	33	Sparsely Settled Area
AUL	34	Caution Area
AUL	997	Unpopulated
AUL	998	Not Applicable
AUL	999	Other

Name: Airspace Use Routes

Code: AUR

Definition: A specified route designed for channeling the flow of traffic as necessary for the provision of air traffic services.

Domain: Enumerated

AUR	0	Unknown
AUR	1	Airway
AUR	2	Air Route
AUR	3	Purple Airway
AUR	4	Royal Low Level Corridor
AUR	5	Corridor
AUR	6	Atlantic
AUR	7	Bahamas
AUR	8	Advisory
AUR	9	Direct
AUR	10	Military
AUR	11	Oceanic
AUR	12	Area Navigation (RNAV)
AUR	13	SUBS
AUR	14	TACAN
AUR	15	Helicopter Route
AUR	16	Helicopter Routes not available to single engine

- AUR 17 Low Flying Route
- AUR 18 Royal Helicopter Route
- AUR 19 Jet
- AUR 20 North America
- AUR 21 Canadian Control Area Tracks
- AUR 997 Unpopulated
- AUR 998 Not Applicable
- AUR 999 Other

Name: Airspace/Facility Operating Times

Code: AUS

Definition: Status of Air Space and any restrictions that are applicable.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Lowest Airspace Height

Code: AV1

Definition: Height (AGL - above ground level) above surface level to the lowest portion of the feature (used only for Air Information).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-32767 to 32767	1 FT	N/A

Name: Highest Airspace Height

Code: AV2

Definition: Height (AGL - above ground level) above surface level to the highest portion of the feature (used only for Air Information).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-32767 to 32767	1 FT	N/A

Name: Absolute Vertical Accuracy in Meters

Code: AVA

Definition: The difference between the recorded elevations of features and their true elevations at a specific point referenced to the same vertical datum at 90% probability.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Air route segments Width

Code: AWD

Definition: Width of individual air route segments.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Lowest Airspace Z-value

Code: AZ1

Definition: Measurement to specify lowest vertical limits.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-32767 to 32767	1 FT	N/A

Name: Highest Airspace Z-value

Code: AZ2

Definition: Measurement to specify highest vertical limits.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-32767 to 32767	1 FT	N/A

Name: Minimum Safe Altitude Sector

Code: AZ3

Definition: The minimum safe altitude, in feet, above MSL which provides a 1000 foot obstacle clearance within the airspace.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-32767 to 32767	1 FT	N/A

Name: Built-Up Area Classification

Code: BAC

Definition: The indication of the relative density of the Built-Up Area

Domain: Enumerated

- BAC 0 Unknown
- BAC 1 Sparse to Moderate
- BAC 2 Dense
- BAC 997 Unpopulated
- BAC 998 Not Applicable
- BAC 999 Other

Name: Bypass Condition Category

Code: BCC

Definition: The ease or ability to circumvent a destroyed section of bridge, tunnel or pass within a 2 kilometer distance on each side of the feature. Bypass condition will not consider other bridges in bypass determination.

Domain: Enumerated

- BCC 0 Unknown
- BCC 1 Easy (Obstacle can be crossed within 2 KM of feature, no work)
- BCC 2 Difficult (Obstacle can be crossed within 2 KM of feature, work required).
- BCC 3 Impossible (Obstacle cannot be bypassed within 2 KM of feature)
- BCC 997 Unpopulated
- BCC 998 Not Applicable
- BCC 999 Other

Name: Bottom Return Rock Classification

Code: BCR

Definition: Tabulates bottom return rock.

Domain: Enumerated

- BCR 0 Unknown
- BCR 1 Classified
- BCR 2 Detected
- BCR 3 Identified
- BCR 997 Unpopulated
- BCR 998 Not Applicable
- BCR 999 Other

Name: Bottom Configuration Type

Code: BCT

Definition: The type of configuration of underwater bottom topography.

Domain: Enumerated

- BCT 0 Unknown
- BCT 1 Double Break in Slope
- BCT 2 Break in Slope
- BCT 3 Depression, Flat Bottom
- BCT 4 Depression, Steep Sided
- BCT 5 Depression, V-Shaped
- BCT 6 Depression, Sediment Filled
- BCT 7 Elevation, Flat Topped
- BCT 8 Elevation, Peaked
- BCT 9 Elevation, Rounded
- BCT 10 Slumped Blocks
- BCT 11 Scarp, Probably Faulted
- BCT 12 Slump Debris

- BCT 13 Step
- BCT 14 Terrace
- BCT 997 Unpopulated
- BCT 998 Not Applicable
- BCT 999 Other

Name: Bridge Design Category

Code: BDC

Definition: Structural design characteristics of the bridge or bridge segment.

Domain: Enumerated

- BDC 0 Unknown
- BDC 1 Arch
- BDC 2 Cantilever
- BDC 3 Deck
- BDC 4 Slab
- BDC 5 Floating Bridge
- BDC 6 Girder
- BDC 7 Stringer (Beam)
- BDC 8 Truss
- BDC 9 Suspension
- BDC 11 VALUE INTENTIONALLY LEFT BLANK (Other)
- BDC 12 Transporter (Ferry Bridge)
- BDC 997 Unpopulated
- BDC 998 Not Applicable
- BDC 999 Other

Name: Basic Encyclopedia Number

Code: BEN

Definition: Unique number associated with a feature which is used to identify the feature in other national or intelligence data bases.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	16 Characters

Name: Berth Identifier

Code: BER

Definition: The designated number or letter used to identify this feature.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Beacon Type Category

Code: BET

Definition: Type of beacon.

Domain: Enumerated

BET	0	Unknown
BET	35	Articulated Lights
BET	36	Floating Beacon
BET	40	Radar Transponder Beacon
BET	41	Pile Beacon
BET	42	Cairn
BET	43	Buoyant Beacon
BET	44	Firing Danger Area Mark
BET	45	Target mark
BET	46	Marker Ship Mark
BET	47	Degaussing Range Mark
BET	48	Barge Mark
BET	49	Cable Mark
BET	50	Outfall Mark
BET	51	Recording Mark
BET	52	Recreation Zone Mark
BET	53	Leading Mark
BET	54	Measured Distance Mark
BET	55	TSS Mark (Traffic Separation Scheme)
BET	56	Anchoring Prohibited Mark
BET	57	Berthing Prohibited Mark
BET	58	Overtaking Prohibited Mark
BET	59	Two-way Traffic Prohibited Mark
BET	60	Reduced Wake Mark
BET	61	Speed Limit Mark
BET	62	Stop Mark
BET	63	Sound Ship's Siren Mark
BET	64	Restricted Vertical Clearance Mark
BET	65	Maximum Vessel's Draught Mark
BET	66	Restricted Horizontal Clearance Mark
BET	67	Strong Current Warning Mark
BET	68	Berthing Permitted Mark
BET	69	Overhead Power Cable Mark
BET	70	Channel Edge Gradient Mark
BET	71	Telephone Mark
BET	72	Ferry Crossing Mark
BET	73	Pipeline Mark
BET	74	Clearing Mark
BET	75	Refuge Beacon
BET	76	Foul Ground Mark

BET	77	Yachting Mark
BET	78	Heliport Mark
BET	79	GPS Mark
BET	80	Seaplane Landing Mark
BET	81	Diving
BET	82	Information
BET	85	Caution
BET	86	Private
BET	87	Swim
BET	88	Control
BET	89	Keep-Out
BET	90	Daybeacon
BET	91	Lateral preferred channel to port mark
BET	92	Lateral preferred channel to starboard mark
BET	93	Lateral starboard-hand mark
BET	94	Lateral port-hand mark
BET	95	Cardinal West Mark
BET	96	Cardinal South Mark
BET	97	Cardinal East Mark
BET	98	Cardinal North Mark
BET	99	Installation
BET	102	Entry Prohibited Mark
BET	103	Work In Progress Mark
BET	104	Daymark Board/Articulated
BET	105	Daymark Board-Triangle
BET	106	Daymark Board-Rectangle
BET	107	Stake/Pole
BET	108	Withy
BET	109	Beacon Tower
BET	110	Lattice Beacon
BET	997	Unpopulated
BET	998	Not Applicable
BET	999	Other

Name: Building Function Category

Code: BFC

Definition: Type or purpose of the building.

Domain: Enumerated

BFC	0	Unknown
BFC	1	Fabrication Structures
BFC	2	Government Building
BFC	3	Capitol Building
BFC	4	Castle
BFC	5	Government Administration Building
BFC	6	Hospital

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Annex B-Attribute and Value Codes

BFC	7	House of Worship
BFC	8	Military Administration/Operations Building
BFC	9	Museum
BFC	10	Observatory
BFC	11	Palace
BFC	12	Police Station
BFC	13	Prison
BFC	14	Ranger Station
BFC	15	School
BFC	16	House
BFC	17	Multi Unit Dwelling
BFC	18	Cemetery Building
BFC	19	Farm Building
BFC	20	Greenhouse
BFC	21	Garage
BFC	22	Watermill/Gristmill
BFC	23	Wind Tunnel
BFC	24	Warehouse
BFC	25	Roundhouse
BFC	26	Railroad Storage/Repair Facility
BFC	27	Depot Terminal
BFC	28	Administration Building
BFC	29	Aircraft Maintenance Shop
BFC	30	Hangar
BFC	31	Customs House
BFC	33	Health Office
BFC	34	Firing Range
BFC	35	Post Office
BFC	36	Barracks/Dormitory
BFC	37	Fire Station
BFC	38	Jail
BFC	39	VALUE INTENTIONALLY LEFT BLANK (Guardhouse)
BFC	40	Telephone Switching Station
BFC	50	Church
BFC	51	Market
BFC	52	Town Hall
BFC	53	Bank
BFC	54	Service/Refueling Station
BFC	55	Yacht Club/Sailing Club
BFC	56	Public Inn
BFC	57	Restaurant
BFC	58	Observation
BFC	59	Research and Development Lab/Research Facility
BFC	60	University/College
BFC	61	Courthouse

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Annex B-Attribute and Value Codes

BFC	62	Legation
BFC	63	Mission
BFC	64	Chancery
BFC	65	Ambassadorial Residence
BFC	66	Embassy
BFC	67	Consulate
BFC	68	Guard House
BFC	69	Guard Shack/Guard Room
BFC	70	Kennel
BFC	71	Oil Mill (Vegetable)
BFC	72	Aerator
BFC	73	Carpentry
BFC	74	Sawmill
BFC	75	Kiln/Oven
BFC	76	Signal Box/Railway Signalman's House
BFC	77	Harbor Master's Office
BFC	78	Marine Police
BFC	79	Rescue
BFC	80	Port Control
BFC	81	Maritime Station
BFC	82	Lighthouse
BFC	83	Power Generation
BFC	84	Filtration Plant
BFC	85	Newspaper Plant
BFC	86	Telephone Exchange (Main)
BFC	87	Auditorium
BFC	88	Opera House
BFC	89	Processing/Treatment
BFC	90	Pumphouse
BFC	91	Mobile Home
BFC	92	Weather Station
BFC	93	Dependents Housing/Bivouac Area
BFC	94	Railroad Station
BFC	95	Hotel
BFC	96	Diplomatic Building
BFC	97	Trading Post
BFC	98	Shed
BFC	99	Battery
BFC	100	Medical Center
BFC	101	Municipal Hall
BFC	102	Oil/Gas Facilities Building
BFC	103	Outbuilding
BFC	104	Paper/Pulp Mill
BFC	105	Reformatory
BFC	106	Sanitarium

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Annex B-Attribute and Value Codes

BFC	107	Satellite Tracking Station
BFC	108	Seminary
BFC	109	Senior Citizen's Home
BFC	110	Shipyard
BFC	111	Sportsplex
BFC	112	Steel Mill
BFC	113	Weigh Scale (Highway)
BFC	114	Non-Christian Place of Worship
BFC	115	Hostel
BFC	116	Factory
BFC	117	Motel
BFC	118	Community Center
BFC	119	City Hall
BFC	120	Automobile Plant
BFC	121	Armory
BFC	122	Shopping Center
BFC	123	Correctional Institute
BFC	124	Repair Facility
BFC	125	Barn/Machinery Shed
BFC	126	Astronomical Station
BFC	127	Theater
BFC	128	Library
BFC	129	Airport Terminal
BFC	130	Bus Station
BFC	131	Pilot Office
BFC	132	Pilot Look-out
BFC	133	Commercial building
BFC	134	Fort
BFC	135	Blockhouse
BFC	136	Martello Tower
BFC	137	Guard Tower
BFC	723	Combined Fire and Police Station
BFC	997	Unpopulated
BFC	998	Not Applicable
BFC	999	Other

Name: Bank Gradient Left

Code: BGL

Definition: Slope of the left bank (facing downstream) above water level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	-90 to 90	1 %	N/A

Name: Bank Gradient Right

Code: BGR

Definition: Slope of the right bank (facing downstream) above water level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	-90 to 90	1 %	N/A

Name: Bank Height Left

Code: BHL

Definition: Height of the left bank above the water level (facing downstream) to the average water level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Decimeters	Short Integer	-32767 to 32767	1 DM	N/A

Name: Bank Height Right

Code: BHR

Definition: Height of the right bank above the water level (facing downstream) to the average water level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Decimeters	Short Integer	-32767 to 32767	1 DM	N/A

Name: Beach Indicator Type

Code: BIT

Definition: Indicates the relative portion of a beach.

Domain: Enumerated

BIT	0	Unknown
BIT	1	Nearshore
BIT	2	Foreshore
BIT	3	Backshore
BIT	997	Unpopulated
BIT	998	Not Applicable
BIT	999	Other

Name: Barge Load Class

Code: BLC

Definition: A description of any load restrictions which apply to barges using a section of waterway or facility.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Bottom Materials Composition

Code: BMC

Definition: Predominant material composition of the bottom of a body of water.

Domain: Enumerated

BMC 0	Unknown
BMC 1	Clay and Silt
BMC 2	Silty Sands
BMC 3	Sand and Gravel
BMC 4	Gravel and Cobble
BMC 5	Rocks and Boulders
BMC 6	Bedrock
BMC 7	Paved
BMC 8	Peat
BMC 9	Sand over mud
BMC 10	Mixed qualities
BMC 11	Coral
BMC 12	Slash
BMC 13	Seamount
BMC 14	Sand
BMC 997	Unpopulated
BMC 998	Not Applicable
BMC 999	Other

Name: Bog Category

Code: BOC

Definition: Tabulates the components or structure of a bog.

Domain: Enumerated

BOC 0	Unknown
BOC 1	Palsa
BOC 2	String
BOC 997	Unpopulated
BOC 998	Not Applicable
BOC 999	Other

Name: Bridge Opening Type

Code: BOT

Definition: The type of structure or mechanism by which a portion of a bridge is moved to allow passage of a vessel.

Domain: Enumerated

BOT 0	Unknown
BOT 4	Draw/Bascule
BOT 10	Swing
BOT 11	Lift

BOT 12 Retractable
 BOT 13 Not Applicable
 BOT 997 Unpopulated
 BOT 999 Other

Name: Broadcast Frequency (2)

Code: BR2

Definition: The frequency on which a station broadcasts (second occurrence).

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Hertz	Long Integer	N/A	1 HZ	N/A

Name: Bottom Return Attributes Classification

Code: BRA

Definition: Tabulates bottom return attributes.

Domain: Enumerated

BRA 0 Unknown
 BRA 1 Classified
 BRA 2 Detected
 BRA 3 Identified
 BRA 997 Unpopulated
 BRA 998 Not Applicable
 BRA 999 Other

Name: Bottom Return Classification

Code: BRC

Definition: Tabulates bottom return types.

Domain: Enumerated

BRC 0 Unknown
 BRC 1 Classification of Bottom Return Identity
 BRC 2 Bottom Return Track Number
 BRC 3 Classification of Bottom Return Seabed Inst.
 BRC 4 Classification of Bottom Return Rock
 BRC 5 Classification of Bottom Return Obstacles
 BRC 6 Classification of Bottom Return Wreck
 BRC 997 Unpopulated
 BRC 998 Not Applicable
 BRC 999 Other

Name: Broadcast Frequency

Code: BRF

Definition: Broadcast frequency of a communications device.

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Hertz	Long Integer	N/A	1 HZ	N/A

Name: Bearing of Object

Code: BRG

Definition: The bearing of an object from an observer (on any point along the line) towards the object or feature, expressed in degrees and tenths (e.g. 3.0 DEG).

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Degrees	Floating Point	0 to 359.9	0.1 DEG	N/A

Name: Bottom Return Identity Classification

Code: BRI

Definition: Tabulates bottom return identity.

Domain: Enumerated

BRI 0 Unknown
 BRI 2 Neutral
 BRI 997 Unpopulated
 BRI 998 Not Applicable
 BRI 999 Other

Name: Bridge Reference Number

Code: BRN

Definition: A unique number relating information to bridge and bridge spans.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	24 Characters

Name: Bottom Return Obstacles Classification

Code: BRO

Definition: Tabulates bottom return obstacles.

Domain: Enumerated

BRO 0 Unknown
 BRO 1 Classified
 BRO 2 Detected
 BRO 3 Identified
 BRO 997 Unpopulated
 BRO 998 Not Applicable
 BRO 999 Other

Name: Bearing and Reciprocal Category

Code: BRR

Definition: True course of a vessel in 0.1 degree increments, when proceeding along a track or route, followed by its reciprocal bearing (i.e. 053.1-233.1).

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	11 Characters

Name: Bearing From Seaward

Code: BRS

Definition: True course of a vessel when proceeding from seaward along a track or course.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Degrees	Floating Point	0 to 360	0.1 DEG	N/A

Name: Bottom Return Track Number

Code: BRT

Definition: Identifies track number.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Short Integer	N/A	1 Unit	N/A

Name: Bottom Return Wreck Classification

Code: BRW

Definition: Tabulates bottom return wreck.

Domain: Enumerated

BRW 0	Unknown
BRW 1	Classified
BRW 2	Detected
BRW 3	Identified
BRW 997	Unpopulated
BRW 998	Not Applicable
BRW 999	Other

Name: Bridge/Bridge Superstructure Category

Code: BSC

Definition: Structural design characteristics.

Domain: Enumerated

BSC 0	Unknown
BSC 1	Arch (assume open spandrel)

BSC	2	Cantilever
BSC	3	Deck
BSC	4	Drawbridge
BSC	5	Floating Bridge/Pontoon
BSC	6	Girder
BSC	7	Tower Suspension
BSC	8	Truss
BSC	9	Suspension
BSC	10	Swing
BSC	11	Lift
BSC	12	Transporter
BSC	13	Bascule
BSC	14	Unspecified Fixed
BSC	15	Slab
BSC	16	Stringer (beam)
BSC	17	Arch Suspension
BSC	18	Retractable
BSC	19	Suspension, bow string
BSC	20	Suspension, cable stayed
BSC	21	Moveable Surface
BSC	22	Covered
BSC	23	Opening
BSC	24	Footbridge
BSC	25	Fixed
BSC	26	Arch (closed spandrel)
BSC	27	Cable Stayed
BSC	997	Unpopulated
BSC	998	Not Applicable
BSC	999	Other

Name: Bridge Span Mobility

Code: BSM

Definition: Identifies bridge spans that move in some manner allowing passage underneath the span.

Domain: Enumerated

BSM	0	Unknown
BSM	1	Moveable Span
BSM	2	Fixed Span
BSM	997	Unpopulated
BSM	998	Not Applicable
BSM	999	Other

Name: Bridge Serial Number

Code: BSN

Definition: Unique number associated with a bridge which is used to identify the bridge in other national or intelligence databases.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	80 Characters

Name: Bridge Span Category

Code: BSP

Definition: Identifies type of moveable span.

Domain: Enumerated

BSP	0	Unknown
BSP	1	Truss
BSP	2	Truss, moveable or swing
BSP	3	Plate girder
BSP	4	Plate girder moveable as vertical lift
BSP	5	Plate girder moveable as draw bridge
BSP	6	Plate girder moveable as bascule
BSP	7	Stringer, beam
BSP	8	Stringer, moveable as vertical lift
BSP	9	Stringer, moveable as draw bridge
BSP	10	Slab
BSP	11	Arc, closed span
BSP	12	Arc, open span
BSP	13	Floating bridge, pontoon bridge
BSP	14	Culvert
BSP	15	Frame structure
BSP	16	Vault structure
BSP	17	Unspecified fixed
BSP	18	Retractable
BSP	997	Unpopulated
BSP	998	Not Applicable
BSP	999	Other

Name: Bottom Return Seabed Inst.

Code: BSR

Definition: True course of a vessel when proceeding from seaward along a track or course.

Domain: Enumerated

BSR	0	Unknown
BSR	1	Classified
BSR	2	Detected

- BSR 3 Identified
- BSR 997 Unpopulated
- BSR 998 Not Applicable
- BSR 999 Other

Name: Boundary Status Type

Code: BST

Definition: Identifies the status of a boundary.

Domain: Enumerated

- BST 0 Unknown
- BST 1 Definite
- BST 2 Indefinite
- BST 3 In Dispute
- BST 4 No Defined Boundary
- BST 997 Unpopulated
- BST 998 Not Applicable
- BST 999 Other

Name: Beacon/Buoy Type Category

Code: BTC

Definition: Type buoy or beacon.

Domain: Enumerated

- BTC 0 Unknown
- BTC 1 Cardinal
- BTC 2 Float
- BTC 3 Isolated Danger
- BTC 4 Large Navigational Buoy (LANBY)
- BTC 5 Lateral
- BTC 6 Light Float
- BTC 7 Mooring
- BTC 8 Mooring with Telegraph
- BTC 9 Mooring with Telephone
- BTC 10 Ocean Data Acquisition System (ODAS)
- BTC 11 Outer, Landfall
- BTC 12 Port (From Seaward or According to Dir. of Buoyage)
- BTC 13 Preferred Channel to Port
- BTC 14 Preferred Channel to Starboard
- BTC 15 Special Purpose
- BTC 16 Starboard (From Seaward per Dir. of Buoyage)
- BTC 17 Tanker
- BTC 18 Safe Water
- BTC 19 Anchorage
- BTC 20 Fairway
- BTC 21 Mid-Channel

BTC	22	Bifurcation
BTC	23	Junction
BTC	24	Wreck
BTC	25	Obstruction
BTC	26	Telegraph Cable
BTC	27	Warping
BTC	28	Quarantine
BTC	29	Practice Area
BTC	30	Explosive Anchorage
BTC	31	Aeronautical Anchorage
BTC	32	Compass Adjustment
BTC	33	Fish Trap
BTC	34	Spoil Ground
BTC	35	Articulated Lights
BTC	36	Floating Beacon
BTC	37	Dan
BTC	38	Floodlit/Illuminated
BTC	39	Trot
BTC	81	Diving
BTC	82	Information
BTC	83	DND Buoy (Canadian Department of National Defence)
BTC	85	Caution
BTC	86	Private
BTC	87	Swim
BTC	88	Control
BTC	89	Keep-Out
BTC	90	Daybeacon
BTC	91	Lateral preferred channel to port mark
BTC	92	Lateral preferred channel to starboard mark
BTC	93	Lateral starboard-hand mark
BTC	94	Lateral port-hand mark
BTC	95	Cardinal West Mark
BTC	96	Cardinal South Mark
BTC	97	Cardinal East Mark
BTC	98	Cardinal North Mark
BTC	99	Installation
BTC	997	Unpopulated
BTC	998	Not Applicable
BTC	999	Other

Name: Brush/Undergrowth Density Code

Code: BUD

Definition: Density of brush or undergrowth.

Domain: Enumerated

BUD	0	Unknown
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BUD 1	Open (<=5%)
BUD 2	Sparse (>5%<=15%)
BUD 3	Medium (>15%<=50%)
BUD 4	Dense (>50%)
BUD 5	Not Applicable
BUD 997	Unpopulated
BUD 998	Not Applicable
BUD 999	Other

Name: Buoy Type Category

Code: BUT

Definition: Type of buoy.

Domain: Enumerated

BUT 0	Unknown
BUT 1	Cardinal
BUT 2	Float
BUT 3	Isolated Danger
BUT 4	Large Navigational Buoy (LANBY)
BUT 5	Lateral
BUT 6	Light Float
BUT 7	Mooring
BUT 8	Mooring with Telegraph
BUT 9	Mooring with Telephone
BUT 10	Ocean Data Acquisition System (ODAS)
BUT 11	Outer, Landfall
BUT 12	Port (From Seaward or According to Dir. of Buoyage)
BUT 13	Preferred Channel to Port
BUT 14	Preferred Channel to Starboard
BUT 15	Special Purpose
BUT 16	Starboard (From Seaward per Dir. of Buoyage)
BUT 17	Tanker
BUT 18	Safe Water
BUT 19	Anchorage
BUT 20	Fairway
BUT 21	Mid-Channel
BUT 22	Bifurcation
BUT 23	Junction
BUT 24	Wreck
BUT 25	Obstruction
BUT 26	Telegraph Cable
BUT 27	Warping
BUT 28	Quarantine
BUT 29	Practice Area
BUT 30	Explosive Anchorage
BUT 31	Aeronautical Anchorage

BUT	32	Compass Adjustment
BUT	33	Fish Trap
BUT	34	Spoil Ground
BUT	35	Articulated Lights
BUT	36	Floating Beacon
BUT	37	Dan
BUT	38	Floodlit/Illuminated
BUT	39	Trot
BUT	81	Diving
BUT	82	Information
BUT	83	DND Buoy (Canadian Department of National Defence)
BUT	84	APEX (ARC) Buoy
BUT	85	Caution
BUT	86	Private
BUT	87	Swim
BUT	88	Control
BUT	89	Keep-Out
BUT	90	Daybeacon
BUT	91	Lateral preferred channel to port mark
BUT	92	Lateral preferred channel to starboard mark
BUT	93	Lateral starboard-hand mark
BUT	94	Lateral port-hand mark
BUT	95	Cardinal West Mark
BUT	96	Cardinal South Mark
BUT	97	Cardinal East Mark
BUT	98	Cardinal North Mark
BUT	99	Installation
BUT	100	Waverider
BUT	101	Wave Meter
BUT	102	Navigation, communication and control buoy (NCCB)
BUT	103	Ice Buoy
BUT	997	Unpopulated
BUT	998	Not Applicable
BUT	999	Other

Name: Bank Vegetation Left

Code: BVL

Definition: Density of vegetation found on the downstream left bank.

Domain: Enumerated

BVL	0	Unknown
BVL	1	Open (<=5%)
BVL	2	Sparse (>5%<=15%)
BVL	3	Medium (>15%<=50%)
BVL	4	Dense (>50%)
BVL	997	Unpopulated

BVL 998 Not Applicable
 BVL 999 Other

Name: Bank Vegetation Right

Code: BVR

Definition: Density of vegetation found on the downstream right bank.

Domain: Enumerated

BVR 0 Unknown
 BVR 1 Open (<=5%)
 BVR 2 Sparse (>5%<=15%)
 BVR 3 Medium (>15%<=50%)
 BVR 4 Dense (>50%)
 BVR 997 Unpopulated
 BVR 998 Not Applicable
 BVR 999 Other

Name: Below Water Bank Slope (Left)

Code: BWL

Definition: Slope (in percent) of the left bank under the water facing downstream.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	-90 to 90	1 %	N/A

Name: Below Water Bank Slope (Right)

Code: BWR

Definition: Slope (in percent) of the right bank under the water facing downstream.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	-90 to 90	1 %	N/A

Name: Rate of Current (IHO)

Code: C60

Definition: Rate of current flow at tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (1) (IHO)

Code: C61

Definition: Rate of current flow 1 hour after tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (2) (IHO)

Code: C62

Definition: Rate of current flow 2 hours after tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (3) (IHO)

Code: C63

Definition: Rate of current flow 3 hours after tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (4) (IHO)

Code: C64

Definition: Rate of current flow 4 hours after tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (5) (IHO)

Code: C65

Definition: Rate of current flow 5 hours after tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (6) (IHO)

Code: C66

Definition: Rate of current flow 6 hours after tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (7) (IHO)

Code: C67

Definition: Rate of current flow 5 hours before tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (8) (IHO)

Code: C68

Definition: Rate of current flow 4 hours before tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (9) (IHO)

Code: C69

Definition: Rate of current flow 3 hours before tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (10) (IHO)

Code: C70

Definition: Rate of current flow 2 hours before tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (11) (IHO)

Code: C71

Definition: Rate of current flow 1 hour before tide reference level.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current

Code: C80

Definition: Rate of current flow at high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (1)

Code: C81

Definition: Rate of current flow 1 hour after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (2)

Code: C82

Definition: Rate of current flow 2 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (3)

Code: C83

Definition: Rate of current flow 3 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (4)

Code: C84

Definition: Rate of current flow 4 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (5)

Code: C85

Definition: Rate of current flow 5 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (6)

Code: C86

Definition: Rate of current flow 6 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (7)

Code: C87

Definition: Rate of current flow 7 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (8)

Code: C88

Definition: Rate of current flow 8 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (9)

Code: C89

Definition: Rate of current flow 9 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (10)

Code: C90

Definition: Rate of current flow 10 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Rate of Current (11)

Code: C91

Definition: Rate of current flow 11 hours after high water.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Cable Classification

Code: CAB

Definition: Tabulates the kind of transmission.

Domain: Enumerated

CAB 0	Unknown
CAB 1	Undefined
CAB 2	Power Line
CAB 3	Telephone
CAB 4	Telegraph
CAB 997	Unpopulated
CAB 998	Not Applicable
CAB 999	Other

Name: Collection Attribute Category

Code: CAC

Definition: Classifies the collection criteria.

Domain: Enumerated

CAC 0	Unknown
CAC 1	Data Not Requested By User
CAC 2	Area Too Rough to Collect
CAC 3	No Available Imagery
CAC 4	Different Height Threshold Within Data Block
CAC 5	Low Data Collection Criteria
CAC 6	No Available Map Source
CAC 7	No Suitable Imagery
CAC 8	Data Not Required
CAC 9	Collected

- CAC 10 Derived
- CAC 997 Unpopulated
- CAC 998 Not Applicable
- CAC 999 Other

Name: Capacity

Code: CAP

Definition: The capacity of a feature. Units will be qualified using a structured text approach, e.g. 100 (cars)[per hour] where the unit is in parentheses () and a qualifier is in brackets[].

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	80 Characters

Name: Constriction/Expansion Category

Code: CCA

Definition: The type of a constriction or expansion.

Domain: Enumerated

- CCA 0 Unknown
- CCA 1 Gateway
- CCA 2 A narrow pass between rocks
- CCA 3 Road siding on narrow roads
- CCA 4 A passage through a building
- CCA 997 Unpopulated
- CCA 998 Not Applicable
- CCA 999 Other

Name: Color Code Category

Code: CCC

Definition: Color of the sea floor, light, buoy, structure, or other feature.

Domain: Enumerated

- CCC 0 Unknown
- CCC 1 Black
- CCC 2 Blue
- CCC 3 Brown
- CCC 4 Gray
- CCC 5 Green
- CCC 7 Chocolate
- CCC 8 VALUE INTENTIONALLY LEFT BLANK
- CCC 9 Orange
- CCC 10 VALUE INTENTIONALLY LEFT BLANK
- CCC 11 VALUE INTENTIONALLY LEFT BLANK
- CCC 12 Red
- CCC 13 VALUE INTENTIONALLY LEFT BLANK

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CCC	14	Violet
CCC	15	White
CCC	16	VALUE INTENTIONALLY LEFT BLANK
CCC	17	VALUE INTENTIONALLY LEFT BLANK
CCC	18	VALUE INTENTIONALLY LEFT BLANK
CCC	19	Yellow
CCC	20	Red & White (RW)
CCC	21	Red & Green (RG)
CCC	22	Red & Black (RB)
CCC	23	Red-Green-Red (RGR)
CCC	24	Green & White (GW)
CCC	25	Green & Red (GR)
CCC	26	Green & Black (GB)
CCC	27	Green-Red-Green (GRG)
CCC	28	Green-Yellow-Black (GYB)
CCC	29	Yellow & Black (YB)
CCC	30	Yellow-Black-Yellow (YBY)
CCC	31	Yellow & Red (YR)
CCC	32	Yellow & Green (YG)
CCC	33	Yellow-Red-White (YRW)
CCC	34	Black & Yellow (BY)
CCC	35	Black-Yellow-Black (BYB)
CCC	36	Black-Red-Black (BRB)
CCC	37	Black & White (BW)
CCC	38	Black & Red (BR)
CCC	39	Black & Green (BG)
CCC	40	White & Red (WR)
CCC	41	White & Orange (WOr)
CCC	42	White & Green (WG)
CCC	43	White & Black (WB)
CCC	44	White & Yellow (WY)
CCC	45	White-Red-Green (WRG)
CCC	46	White-Green-White (WGW)
CCC	47	Magenta
CCC	48	Amber
CCC	49	Buff
CCC	50	Nautical Purple
CCC	51	Pink
CCC	997	Unpopulated
CCC	998	Not Applicable
CCC	999	Other

Name: Color Code Remarks

Code: CCR

Definition: Textual description of unique aspects of buoy or beacon coloring.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Covered Drain Attribute

Code: CDA

Definition: Condition where an artificial or improved natural drainage way is completely covered over and connects open drainage ways at each end.

Domain: Enumerated

CDA 0	Unknown
CDA 1	Uncovered
CDA 2	Covered
CDA 3	Not Applicable
CDA 997	Unpopulated
CDA 998	Not Applicable
CDA 999	Other

Name: Covered Drain Length

Code: CDL

Definition: Length of covered drainage way.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Calendar Date Type

Code: CDP

Definition: The type of report or activity.

Domain: Enumerated

CDP 0	Unknown
CDP 1	Aerial Photography
CDP 2	Air Information
CDP 3	Approximate
CDP 4	Field Classification
CDP 5	Compilation
CDP 6	Copyright
CDP 7	Creation
CDP 8	Digitizing
CDP 9	Distribution/Dispatching

- CDP 10 Downgrading
- CDP 11 Drafting/Scribing/Drawing
- CDP 12 Edition
- CDP 13 Field Examination
- CDP 14 Intelligence
- CDP 15 Date Interpretable
- CDP 16 Processing
- CDP 17 Print/Publication
- CDP 18 Receipt
- CDP 19 Source
- CDP 20 Earliest Date of Source
- CDP 21 Latest Date of Source
- CDP 22 Specifications
- CDP 23 Survey
- CDP 24 Up-to-dateness/revision
- CDP 25 Map Edit
- CDP 26 Information as of ---
- CDP 27 Perishable Information Date
- CDP 28 Cycle Date
- CDP 29 Significant Date
- CDP 30 Date of Magnetic Information
- CDP 31 Notice to Mariners
- CDP 997 Unpopulated
- CDP 998 Not Applicable
- CDP 999 Other

Name: Calendar Date Value

Code: CDV

Definition: The calendar date as specified by ISO 8601.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	8 Characters

Name: Cut/Embankment Type Category

Code: CET

Definition: Identifies the number of sides that are used as a cut or an embankment.

Domain: Enumerated

- CET 0 Unknown
- CET 1 One Side
- CET 2 Both Sides
- CET 997 Unpopulated
- CET 998 Not Applicable
- CET 999 Other

Name: Cultural Feature Density

Code: CFD

Definition: The measure of the concentration of buildings and other cultural features within the delineation of this feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	0 to 100	1 %	N/A

Name: Light Characteristic Category

Code: CHA

Definition: The sequence, grouping, and distinctive character of a light.

Domain: Enumerated

- CHA 0 Unknown
- CHA 1 Alternating
- CHA 2 Composite Group Flashing
- CHA 3 Composite Group Occulting
- CHA 4 Ultra Quick
- CHA 5 Fixed
- CHA 6 Fixed and Flashing
- CHA 7 Fixed and Group Flashing
- CHA 8 Flashing
- CHA 9 Group Flashing
- CHA 10 Group Occulting
- CHA 11 Interrupted Quick Flashing
- CHA 12 Interrupted Ultra Quick
- CHA 13 Interrupted Very Quick
- CHA 14 Isophase
- CHA 15 Long-Flashing
- CHA 16 Morse Code
- CHA 17 Occulting
- CHA 19 VALUE INTENTIONALLY LEFT BLANK
- CHA 20 VALUE INTENTIONALLY LEFT BLANK
- CHA 21 Lighted
- CHA 22 VALUE INTENTIONALLY LEFT BLANK
- CHA 23 Unlighted
- CHA 24 VALUE INTENTIONALLY LEFT BLANK
- CHA 25 VALUE INTENTIONALLY LEFT BLANK
- CHA 26 VALUE INTENTIONALLY LEFT BLANK
- CHA 27 VALUE INTENTIONALLY LEFT BLANK
- CHA 28 Group Quick Flashing
- CHA 29 Group Very Quick
- CHA 30 Very Quick
- CHA 31 Quick

- CHA 32 VALUE INTENTIONALLY LEFT BLANK
- CHA 33 Intensified
- CHA 34 VALUE INTENTIONALLY LEFT BLANK
- CHA 35 VALUE INTENTIONALLY LEFT BLANK
- CHA 36 Directional
- CHA 37 VALUE INTENTIONALLY LEFT BLANK
- CHA 38 VALUE INTENTIONALLY LEFT BLANK
- CHA 39 VALUE INTENTIONALLY LEFT BLANK
- CHA 40 VALUE INTENTIONALLY LEFT BLANK
- CHA 41 VALUE INTENTIONALLY LEFT BLANK
- CHA 42 VALUE INTENTIONALLY LEFT BLANK
- CHA 43 Directional Moiré
- CHA 44 Quick flashing
- CHA 45 Very quick flashing
- CHA 46 Flash / long flash
- CHA 47 Occulting / flash
- CHA 48 Fixed / long flash
- CHA 49 Occulting alternating
- CHA 50 Long flash alternating
- CHA 51 Flash alternating
- CHA 52 Group alternating
- CHA 53 2 fixed (vertical)
- CHA 54 2 fixed (horizontal)
- CHA 55 3 fixed (vertical)
- CHA 56 3 fixed (horizontal)
- CHA 57 Quick-Flash Plus Long-Flash
- CHA 58 Very Quick-Flash Plus Long-Flash
- CHA 59 Ultra Quick-Flash Plus Long-Flash
- CHA 60 Fixed And Alternating Flashing
- CHA 997 Unpopulated
- CHA 998 Not Applicable
- CHA 999 Other

Name: Channel Number

Code: CHL

Definition: The channel representing the frequency assigned by the controlling authority.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	80 Characters

Name: Color Intensity Category

Code: CIC

Definition: Identifies the intensity of color.

Domain: Enumerated

CIC 0 Unknown
CIC 1 Dark
CIC 2 Light
CIC 997 Unpopulated
CIC 998 Not Applicable
CIC 999 Other

Name: Communication Lines Isolation

Code: CLI

Definition: Distinguishes between communication lines that are in the open by themselves (isolated) and those that are in the midst of other features (not isolated).

Domain: Enumerated

CLI 0 Unknown
CLI 1 Isolated
CLI 2 Not isolated
CLI 997 Unpopulated
CLI 998 Not Applicable
CLI 999 Other

Name: Conspicuous Category

Code: COC

Definition: A conspicuous object is easily identifiable and plainly visible under varying conditions of light from harbors, approach channels, or offshore because of its size, shape, or height.

Domain: Enumerated

COC 0 Unknown
COC 1 Conspicuous from sea
COC 2 VALUE INTENTIONALLY LEFT BLANK
COC 3 Radar Conspicuous from sea
COC 4 Conspicuous from land
COC 5 Conspicuous from air
COC 6 Inconspicuous
COC 7 Generally Conspicuous
COC 8 Not visual conspicuous
COC 9 Visual conspicuous
COC 10 Not radar conspicuous
COC 997 Unpopulated
COC 998 Not Applicable
COC 999 Other

Name: Certainty of Delineation

Code: COD

Definition: Indicates knowledge of the feature's limits or information.

Domain: Enumerated

COD 0 Unknown

- COD 1 Limits and Information Known
- COD 2 Limits and Information Unknown
- COD 997 Unpopulated
- COD 998 Not Applicable
- COD 999 Other

Name: Certainty of Existence

Code: COE

Definition: Indicates knowledge of the feature's existence.

Domain: Enumerated

- COE 0 Unknown
- COE 1 Definite
- COE 2 Doubtful
- COE 3 Reported
- COE 997 Unpopulated
- COE 998 Not Applicable
- COE 999 Other

Name: Character of Light

Code: COL

Definition: Any identifier composed of the class, number and color(s) of flashes or occultations, of a light or lights at one geographic position [e.g. Q(6)+L F1, VQ G, L F1 (3+2)WR].

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Contour Type Category

Code: COT

Definition: Classifies the type of contour.

Domain: Enumerated

- COT 0 Unknown
- COT 1 Depression
- COT 997 Unpopulated
- COT 998 Not Applicable
- COT 999 Other

Name: Control Point Attribute

Code: CPA

Definition: Type of control point.

Domain: Enumerated

- CPA 0 Unknown
- CPA 1 Bench Mark
- CPA 2 Horizontal

- CPA 3 Horizontal With Bench Mark
- CPA 4 Astronomic position
- CPA 5 Vertical
- CPA 6 Main station
- CPA 7 Secondary station
- CPA 997 Unpopulated
- CPA 998 Not Applicable
- CPA 999 Other

Name: Crane Type Category

Code: CRA

Definition: Type of crane.

Domain: Enumerated

- CRA 0 Unknown
- CRA 1 VALUE INTENTIONALLY LEFT BLANK
- CRA 2 Bridge/Gantry
- CRA 3 Rotating
- CRA 4 Floating
- CRA 5 Fixed
- CRA 6 Traveling
- CRA 99 Container
- CRA 997 Unpopulated
- CRA 998 Not Applicable
- CRA 999 Other

Name: Crossing Category

Code: CRC

Definition: Shape attributed to the crossing of two or more lines of communication.

Domain: Enumerated

- CRC 0 Unknown
- CRC 1 Junction
- CRC 2 Intersection
- CRC 3 Star shaped branching (more than 4 roads)
- CRC 997 Unpopulated
- CRC 998 Not Applicable
- CRC 999 Other

Code: CRM

Definition: Indicates the mobility of a crane type. (See CRA.)

Domain: Enumerated

- CRM 0 Unknown
- CRM 1 Fixed
- CRM 2 Traveling

CRM 3 Floating
 CRM 997 Unpopulated
 CRM 998 Not Applicable
 CRM 999 Other

Name: Current Rate Minimum

Code: CRN

Definition: Minimum speed of current.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Current Rate (Speed)

Code: CRS

Definition: Current speed in knots.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Depth Curve or Contour Value

Code: CRV

Definition: A specified value assigned to a particular depth curve or contour.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Current Rate Maximum

Code: CRX

Definition: Maximum speed of current.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Knots	Floating Point	N/A	0.1 KNOT	N/A

Name: Crossing Category

Code: CSC

Definition: Defines the method of traffic control for a road crossing.

Domain: Enumerated

CSC 0 Unknown
 CSC 2 Signal Devices

- CSC 3 Stop Sign(s)
- CSC 4 No control or warning signs.
- CSC 997 Unpopulated
- CSC 998 Not Applicable
- CSC 999 Other

Name: Secondary Material Characteristics

Code: CSM

Definition: Characteristics of secondary material composition of feature.

Domain: Enumerated

- CSM 0 Unknown
- CSM 1 Broken
- CSM 2 Coarse
- CSM 3 Decayed
- CSM 4 Fine, Minute Particles
- CSM 5 Gritty
- CSM 6 Hard
- CSM 7 Rotten
- CSM 8 Soft
- CSM 9 Sticky
- CSM 10 Stiff
- CSM 11 Streaky
- CSM 12 Tenacious
- CSM 13 Uneven
- CSM 17 Calcareous
- CSM 18 Flinty
- CSM 19 Glacial
- CSM 20 Ground
- CSM 21 Large
- CSM 22 Rocky
- CSM 23 Small
- CSM 24 Speckled
- CSM 25 Varied
- CSM 26 Volcanic
- CSM 27 Medium
- CSM 997 Unpopulated
- CSM 998 Not Applicable
- CSM 999 Other

Name: Culvert Type Category

Code: CTC

Definition: Divides culverts into various categories, of which the two main ones are regular culverts and box culverts, either of which can be earth back-filled.

Domain: Enumerated

- CTC 0 Unknown
- CTC 1 Regular, Earth Back-Filled
- CTC 2 Box, Earth Back-Filled
- CTC 3 Box, Load Bearing
- CTC 997 Unpopulated
- CTC 998 Not Applicable
- CTC 999 Other

Name: Cumulative Track Length

Code: CTL

Definition: Total cumulative length of track contained within confines of the feature, exclusive of the branch or main trunk lines running into and/or out of the feature.

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Long Integer	N/A	1 M	N/A

Name: Current Type Category

Code: CUR

Definition: The horizontal movement of a body of water.

Domain: Enumerated

- CUR 0 Unknown
- CUR 1 Ebb
- CUR 2 Flood
- CUR 3 General Flow
- CUR 4 River Flow
- CUR 5 Ocean Flow
- CUR 6 Rip
- CUR 7 Longshore
- CUR 997 Unpopulated
- CUR 998 Not Applicable
- CUR 999 Other

Name: Depth Curve or Contour Value High

Code: CVH

Definition: The maximum value of a depth curve polygon.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Depth Curve or Contour Value Low

Code: CVL

Definition: The minimum value of a depth curve polygon.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Direction of Current (IHO)

Code: D60

Definition: Direction of current flow at tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (1) (IHO)

Code: D61

Definition: Direction of current flow 1 hour after tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (2) (IHO)

Code: D62

Definition: Direction of current flow 2 hours after tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (3) (IHO)

Code: D63

Definition: Direction of current flow 3 hours after tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (4) (IHO)

Code: D64

Definition: Direction of current flow 4 hours after tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (5) (IHO)

Code: D65

Definition: Direction of current flow 5 hours after tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (6) (IHO)

Code: D66

Definition: Direction of current flow 6 hours after tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (7) (IHO)

Code: D67

Definition: Direction of current flow 5 hours before tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (8) (IHO)

Code: D68

Definition: Direction of current flow 4 hours before tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (9) (IHO)

Code: D69

Definition: Direction of current flow 3 hours before tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (10) (IHO)

Code: D70

Definition: Direction of current flow 2 hours before tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (11) (IHO)

Code: D71

Definition: Direction of current flow 1 hour before tide reference level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current

Code: D80

Definition: Direction of current flow at high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (1)

Code: D81

Definition: Direction of current flow 1 hour after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (2)

Code: D82

Definition: Direction of current flow 2 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (3)

Code: D83

Definition: Direction of current flow 3 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (4)

Code: D84

Definition: Direction of current flow 4 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (5)

Code: D85

Definition: Direction of current flow 5 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (6)

Code: D86

Definition: Direction of current flow 6 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (7)

Code: D87

Definition: Direction of current flow 7 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (8)

Code: D88

Definition: Direction of current flow 8 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (9)

Code: D89

Definition: Direction of current flow 9 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (10)

Code: D90

Definition: Direction of current flow 10 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Current (11)

Code: D91

Definition: Direction of current flow 11 hours after high water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Description of Aids to Navigation

Code: DAN

Definition: Textual description of aids to navigation marking a feature, e.g.. "Marked by buoys".

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Depth Below Surface Level

Code: DEP

Definition: Distance measured from the highest point at surface level to the lowest point of the feature below the surface. Recorded values are positive numbers.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Direction of Traffic - 1

Code: DF1

Definition: Direction of traffic, first occurrence.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Traffic - 2

Code: DF2

Definition: Direction of traffic, second occurrence.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Traffic - 3

Code: DF3

Definition: Direction of traffic, third occurrence.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Direction of Traffic - 4

Code: DF4

Definition: Direction of traffic, fourth occurrence.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Dam Face Type

Code: DFT

Definition: Type of face of a dam.

Domain: Enumerated

DFT	0	Unknown
DFT	1	Vertical
DFT	2	Slope
DFT	997	Unpopulated
DFT	998	Not Applicable
DFT	999	Other

Name: Drop Gate Category

Code: DGC

Definition: Distinguishes between two drop gate types.

Domain: Enumerated

DGC	0	Unknown
DGC	1	Overhead Drop
DGC	2	Side Drop
DGC	997	Unpopulated
DGC	998	Not Applicable
DGC	999	Other

Name: Directivity

Code: DIR

Definition: The side or sides of a feature which produces the greatest reflectivity potential.

Domain: Enumerated

DIR	0	Unknown
DIR	1	Uni
DIR	2	Bi
DIR	3	Omni
DIR	997	Unpopulated
DIR	998	Not Applicable
DIR	999	Other

Name: Density Measure (Brush/Undergrowth)

Code: DMB

Definition: Actual percent (%) of ground covered by undergrowth.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	0 to 100	1 %	N/A

Name: Density Measure (Feature Count)

Code: DMF

Definition: Indicates the number of features of this type within an area.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Features	Short Integer	-32767 to 32767	1 FEATURE	N/A

Name: Density Measure (% of Kelp Cover)

Code: DMK

Definition: Concentration of kelp weed in the sea, measured in percent coverage within area of feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	0 to 100	1 %	N/A

Name: Density Measure (% of Roof Cover)

Code: DMR

Definition: Roof cover measured by percent within area of feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	0 to 100	1 %	N/A

Name: Density Measure (Structure Count)

Code: DMS

Definition: Density of structures within a square kilometer (1000m x 1000m).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Structures	Short Integer	-32767 to 32767	1 STRUCTURE	N/A

Name: Density Measure (% of Tree/Canopy Cover)

Code: DMT

Definition: Canopy cover measured by percent within area of feature during the summer season.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	0 to 100	1 %	N/A

Name: Direction of Flow

Code: DOF

Definition: Bearing of movement or direction of the flow.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Highest level of ground water

Code: DP1

Definition: Highest annual average level of ground water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Lowest level of ground water

Code: DP2

Definition: Lowest annual average level of ground water.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Depth Range Value 1

Code: DR1

Definition: Minimum value of a depth range.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Depth Range Value 2

Code: DR2

Definition: Maximum value of a depth range.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Depth Range With Greater Precision Value 1

Code: DR3

Definition: Minimum value of a depth range.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Depth Range With Greater Precision Value 2

Code: DR4

Definition: Maximum value of a depth range.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Description of Reference Point

Code: DRP

Definition: Description of the feature(s) which form a Leading Line or Clearing Line.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Density of Woody Vegetation Range

Code: DRW

Definition: Range indicating percentage of total ground surface covered by Trees (EC030) and Scrub Brush (EB015) within delineated area of feature.

Domain: Enumerated

DRW 0	Unknown
DRW 1	>0 % and <= 5 %
DRW 2	>5 % and <=15 %
DRW 3	>15 %
DRW 4	Not Applicable
DRW 997	Unpopulated

DRW 999 Other

Code: DTE

Definition: Latest date on which an object (e.g. a buoy) will be present. Coded YYYYMMDD.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	8 Characters

Code: DTS

Definition: Earliest date on which an object (e.g. a buoy) will be present. Coded YYYYMMDD.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	8 Characters

Name: Depth of Water (1)

Code: DW1

Definition: Predominant water depth within delineation of feature, determined in meters at the greatest depth along a cross section of the feature (First Range).

Domain: Enumerated

DW1 0	Unknown
DW1 1	<= 0.8
DW1 2	> 0.8 and <= 1.6
DW1 3	> 1.6 and <= 2.4
DW1 4	> 2.4
DW1 5	Not Applicable
DW1 997	Unpopulated
DW1 999	Other

Name: Depth of Water (2)

Code: DW2

Definition: Predominant water depth within delineation of feature, determined in meters at the greatest depth along a cross section of the feature (Second Range).

Domain: Enumerated

DW2 0	Unknown
DW2 1	<= 1.6
DW2 2	> 1.6 and <= 2.4
DW2 3	> 2.4
DW2 4	Not Applicable
DW2 997	Unpopulated
DW2 999	Other

Name: Educational Building Type

Code: EBT

Definition: Identifies the type of educational building.

Domain: Enumerated

EBT	0	Unknown
EBT	1	Academy
EBT	2	College
EBT	3	Educational Center
EBT	4	Lyceum
EBT	5	University
EBT	6	Seminary
EBT	8	Not Applicable
EBT	997	Unpopulated
EBT	999	Other

Name: Electronic Depth

Code: EDP

Definition: Depth of water obtained by electronic depth measuring instruments.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	0 to 32767	1 M	N/A

Name: Elevation Accuracy

Code: ELA

Definition: Indicates whether the ZVL value is accurately known.

Domain: Enumerated

ELA	0	Unknown
ELA	1	Accurate
ELA	2	Approximate
ELA	997	Unpopulated
ELA	998	Not Applicable
ELA	999	Other

Name: Elevation of Light

Code: EOL

Definition: The elevation of a light.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Electrical Power Capacity

Code: EPW

Definition: Electrical Power capacity of a feature expressed in megawatts.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Megawatts	Short Integer	-32767 to 32767	1 MW	N/A

Name: Electric Tension

Code: ETN

Definition: The nominal voltage of supplied power to a transport system.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Volts	Short Integer	-32767 to 32767	1 VOLT	N/A

Name: Existence Category

Code: EXS

Definition: The state or condition of the feature.

Domain: Enumerated

EXS 0	Unknown
EXS 1	Definite
EXS 2	Doubtful
EXS 3	Reported
EXS 4	VALUE INTENTIONALLY LEFT BLANK
EXS 5	Under Construction
EXS 6	Abandoned/Disused
EXS 7	Destroyed
EXS 8	Dismantled
EXS 10	Proposed
EXS 11	Temporary
EXS 12	Alternate
EXS 13	VALUE INTENTIONALLY LEFT BLANK
EXS 16	VALUE INTENTIONALLY LEFT BLANK
EXS 17	VALUE INTENTIONALLY LEFT BLANK
EXS 18	Permanent
EXS 19	VALUE INTENTIONALLY LEFT BLANK
EXS 20	Corresponds to Recommended Track
EXS 21	Does Not Correspond to Recommended Track
EXS 22	One-Way
EXS 23	Two-Way
EXS 25	Not Maintained
EXS 26	Maintained

EXS	27	Closed/Locked
EXS	28	Operational
EXS	29	VALUE INTENTIONALLY LEFT BLANK
EXS	30	Not Isolated
EXS	31	Isolated
EXS	32	Navigable
EXS	33	Ruined
EXS	34	VALUE INTENTIONALLY LEFT BLANK
EXS	35	VALUE INTENTIONALLY LEFT BLANK (Other)
EXS	36	Commissioned and Operational
EXS	37	Commissioned and on Test
EXS	38	Commissioned and out of service
EXS	39	Not commissioned and operational
EXS	40	Not commissioned and on test
EXS	41	Not commissioned and out of service
EXS	42	Continuous Operation
EXS	43	Intermittent operation
EXS	44	Approximate/About
EXS	45	Natural
EXS	46	Man-Made
EXS	47	Swept
EXS	48	Controlled
EXS	49	Non-Controlled
EXS	50	Non-Tidal
EXS	51	Tidal/Tidal Fluctuation
EXS	52	Dissipating
EXS	53	Incomplete
EXS	54	Antique/Ancient
EXS	55	Unexamined/Unsurveyed
EXS	56	Unattended/Unwatched
EXS	57	Sonar Confirmed
EXS	58	Sonar Not Confirmed
EXS	59	Not Usable
EXS	60	Indefinite (Shoreline)
EXS	61	Definite Shoreline
EXS	62	Partially Destroyed
EXS	65	Inactive
EXS	66	Damaged
EXS	70	Occasional
EXS	71	Recommended
EXS	72	Illuminated
EXS	73	Historic
EXS	74	Synchronized
EXS	75	Watched
EXS	723	Navigable and abandoned

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Annex B-Attribute and Value Codes

EXS 724 Navigable and operational
 EXS 997 Unpopulated
 EXS 998 Not Applicable
 EXS 999 Other

Name: Ferry Crossing Length

Code: FCL

Definition: Length of crossing between shore points.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Feature Configuration

Code: FCO

Definition: Configuration of feature.

Domain: Enumerated

FCO 0 Unknown
 FCO 1 Dispersed
 FCO 2 Multiple
 FCO 3 Single
 FCO 4 Inclined
 FCO 5 Divided same widths
 FCO 6 Divided different widths
 FCO 7 Non-divided
 FCO 8 Poorly defined
 FCO 9 Well-defined
 FCO 11 Double
 FCO 12 Juxtaposition
 FCO 997 Unpopulated
 FCO 998 Not Applicable
 FCO 999 Other

Name: Ferry Crossing Times

Code: FCT

Definition: The usual time taken for a ferry crossing, including typical loading and unloading times.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Minutes	Short Integer	-32767 to 32767	1 Minute	N/A

Name: Fog Detector

Code: FDT

Definition: Indicates whether or not a fog detector light is attached to, or connected with the feature.

Domain: Enumerated

FDT 0 Unknown
 FDT 1 Fog Detector Light Present
 FDT 2 Fog Detector Light Absent
 FDT 997 Unpopulated
 FDT 998 Not Applicable
 FDT 999 Other

Name: Feature Element Orientation

Code: FEO

Definition: The angular distance measured from true north (0 deg) clockwise to the predominant linear pattern of the elements within the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Ferry Type

Code: FER

Definition: Indicates the maneuverability of a ferry vessel.

Domain: Enumerated

FER 0 Unknown
 FER 1 With cables/chains
 FER 2 Without cables/chains
 FER 3 Ice Ferry
 FER 997 Unpopulated
 FER 998 Not Applicable
 FER 999 Other

Name: Fuel Facilities Available

Code: FFA

Definition: Fuel facilities available at or in the near vicinity.

Domain: Enumerated

FFA 0 Unknown
 FFA 1 Gasoline
 FFA 2 Aviation Fuel
 FFA 3 Kerosene
 FFA 4 Water
 FFA 5 Diesel
 FFA 6 Coal

FFA	7	Oil
FFA	8	Lubricants
FFA	9	Methane
FFA	10	Special
FFA	11	Liquid Propane Gas (LPG)
FFA	12	Compressed Natural Gas (CNG)
FFA	13	Butane
FFA	14	Ethanol
FFA	995	None
FFA	997	Unpopulated
FFA	998	Not Applicable
FFA	999	Other

Name: Fishing Facility Classification

Code: FFC

Definition: Encodes the various types of fishing facilities.

Domain: Enumerated

FFC	0	Undefined
FFC	1	Fishing stake
FFC	2	Fish trap
FFC	3	Fish weir
FFC	4	Tunny/Tuna net
FFC	997	Unpopulated
FFC	998	Not Applicable
FFC	999	Other

Name: Harbor Facility Classification

Code: FHC

Definition: Tabulates the kind of operation/service.

Domain: Enumerated

FHC	0	Undefined
FHC	1	Ro-Ro terminal (Roll on, Roll off)
FHC	2	Timber yard
FHC	3	Ferry Terminal
FHC	4	Fishing Harbor
FHC	5	Yacht harbor/marina
FHC	6	Naval base
FHC	7	Tanker terminal
FHC	8	Passenger terminal
FHC	9	Shipyard
FHC	10	Container terminal
FHC	11	Bulk Terminal
FHC	997	Unpopulated
FHC	998	Not Applicable

FHC 999 Other

Name: Flight Level 1

Code: FL1

Definition: A minimum surface of constant atmospheric pressure which is related to a specific pressure datum, (1,013.2 hectopascal (hPa) or 29.92 inches) and is separated from the consecutive flight levels by a pressure interval corresponding to 500 feet (152.4 m.).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-32767 to 32767	1 FT	N/A

Name: Flight Level 2

Code: FL2

Definition: A maximum surface of constant atmospheric pressure which is related to a specific pressure datum, (1,013.2 hectopascal (hPa) or 29.92 inches) and is separated from the consecutive flight levels by a pressure interval corresponding to 500 feet (152.4 m.).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-32767 to 32767	1 FT	N/A

Name: Floodlit Illumination

Code: FLT

Definition: Indication of the presence of floodlighting to illuminate the structure of a light.

Domain: Enumerated

FLT	0	Unknown
FLT	1	Floodlit
FLT	2	Not Floodlit
FLT	997	Unpopulated
FLT	998	Not Applicable
FLT	999	Other

Name: Frequency of Signal

Code: FRQ

Definition: Audio frequency of acoustical signal.

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Hertz	Long Integer	N/A	1 HZ	N/A

Name: Firing Range Type

Code: FRT

Definition: Type of firing range.

Domain: Enumerated

FRT	0	Unknown
FRT	1	Rifle/Small Arms
FRT	2	Tank
FRT	3	Artillery
FRT	4	Grenade
FRT	5	Demolition Area
FRT	6	Impact Area
FRT	997	Unpopulated
FRT	998	Not Applicable
FRT	999	Other

Name: Farming Type Category

Code: FTC

Definition: Type of field pattern or use.

Domain: Enumerated

FTC	0	Unknown
FTC	1	Slash & Burn-Shifting cultivation
FTC	2	Permanent field
FTC	3	Terraced
FTC	4	Ditch Irrigation
FTC	5	Grazing
FTC	6	Regular (planting pattern)
FTC	7	Linear (planting pattern)
FTC	8	Crop Rotation
FTC	9	Not Applicable
FTC	98	Type of field Pattern
FTC	997	Unpopulated
FTC	999	Other

Name: Fence Type Indicator

Code: FTI

Definition: Type of fence.

Domain: Enumerated

FTI	0	Unknown
FTI	1	Metal
FTI	2	Wood
FTI	3	Stone
FTI	4	Rock
FTI	5	Barbed Wire

- FTI 6 Chain Link
- FTI 997 Unpopulated
- FTI 998 Not Applicable
- FTI 999 Other

Name: Fabrication Type

Code: FTP

Definition: Denotes the type of fabrication industry as light or heavy. Light fabrication industries are characterized by light steel or woodframe buildings and lack heavy equipment. Heavy fabrication industries are characterized by large heavy steel frame buildings and may utilize large cranes for heavy lifting.

Domain: Enumerated

- FTP 0 Unknown
- FTP 1 Light Fabrication (Light fabrication industries are characterized by light steel or woodframe buildings and lack heavy equipment.)
- FTP 2 Heavy Fabrication (Heavy fabrication industries are characterized by large heavy steel frame buildings and may utilize large cranes for heavy lifting.)
- FTP 997 Unpopulated
- FTP 998 Not Applicable
- FTP 999 Other

Name: Feature Rate

Code: FTR

Definition: A quantified rate associated with a feature (e.g. Cars crossing a Bridge-AQ040). Units will be quantified using a structured text approach (e.g. 100(cars)[crossing bridge per hour] where the type of unit is in parentheses () and a unit qualifier is in brackets [].

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	80 Characters

Name: Feature Vertical Orientation

Code: FVO

Definition: Describes the orientation of the usual axis of a feature relative to the vertical.

Domain: Enumerated

- FVO 0 Unknown
- FVO 1 Upright
- FVO 2 On side
- FVO 3 Leaning
- FVO 4 Inverted
- FVO 5 Horizontal
- FVO 997 Unpopulated
- FVO 998 Not Applicable
- FVO 999 Other

Name: Gauge Width

Code: GAW

Definition: The width of a single pair of rails, measured along the shortest distance from inside rail to inside rail.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Centimeters	Short Integer	-32767 to 32767	1 CM	N/A

Name: Geomorphic Height

Code: GEH

Definition: Height of the feature above average surface level as determined by a corresponding digital elevation matrix.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	1 M	N/A

Name: Generation of Fog Signal Category

Code: GEN

Definition: Type of mechanism of fog signal generating.

Domain: Enumerated

GEN 0	Undefined
GEN 1	Automatically
GEN 2	By wave action
GEN 3	By hand
GEN 4	By wind
GEN 997	Unpopulated
GEN 998	Not Applicable
GEN 999	Other

Name: Geographic Location Category

Code: GEO

Definition: Describes the general geographic location of the feature.

Domain: Enumerated

GEO 0	Unknown
GEO 1	Arctic
GEO 997	Unpopulated
GEO 998	Not Applicable
GEO 999	Other

Name: Greater Than / Less Than Contour Interval

Code: GLI

Definition: Indicates whether the predominant feature height or depth is greater than (or equal to), or less than the contour interval.

Domain: Enumerated

- GLI 0 Unknown
- GLI 1 Greater than or equal to contour interval
- GLI 2 Less than contour interval
- GLI 997 Unpopulated
- GLI 998 Not Applicable
- GLI 999 Other

Name: Gate (Nautical) Classification

Code: GNC

Definition: Tabulation of various types of nautical gates.

Domain: Enumerated

- GNC 0 Undefined
- GNC 1 Gate in general
- GNC 2 Tidal Gate (Flood Barrage)
- GNC 3 Caisson
- GNC 4 Lock Gate
- GNC 5 Dyke Gate
- GNC 997 Unpopulated
- GNC 998 Not Applicable
- GNC 999 Other

Name: Geomorphic Depth

Code: GPD

Definition: Depth of the feature below average surface level as determined by a corresponding digital elevation matrix. If not obtainable, the average depth will be used.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	1 M	N/A

Name: Group of Signals Definition

Code: GRP

Definition: Encodes the number of signals, the combination of signals or the Morse character(s) within one full period of sequence.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Ground Slope Category

Code: GSC

Definition: Range indicating the slope of ground within delineated area of feature usually manually derived, reported in percent.

Domain: Enumerated

GSC	0	Unknown
GSC	1	(0 to > 45) Culturally or Naturally Dissected Land
GSC	2	<= 3
GSC	3	> 3 and <= 10
GSC	4	> 10 and <= 20
GSC	5	> 20 and <= 30
GSC	6	> 30 and <= 45
GSC	7	> 45
GSC	8	> 10 and <= 15
GSC	9	> 15 and <= 20
GSC	10	> 45 and <= 60
GSC	11	> 60
GSC	12	> 60 and <= 85
GSC	13	> 85
GSC	997	Unpopulated
GSC	998	Not Applicable
GSC	999	Other

Name: Gate Type Category

Code: GTC

Definition: The classification of the type of barrier or gate.

Domain: Enumerated

GTC	0	Unknown
GTC	1	Tollgate
GTC	2	Crossing
GTC	99	VALUE INTENTIONALLY LEFT BLANK (Other)
GTC	997	Unpopulated
GTC	998	Not Applicable
GTC	999	Other

Name: Guyed or Unguyed Category

Code: GUG

Definition: Presence of support wires.

Domain: Enumerated

GUG	0	Unknown
GUG	1	Guyed
GUG	2	Unguyed
GUG	997	Unpopulated

GUG 998 Not Applicable

GUG 999 Other

Name: Gap Width Range (1)

Code: GW1

Definition: Predominant horizontal gap width range (1) in meters, measured between the top of the first accessible break in slope above mean water level on each bank.

Domain: Enumerated

GW1 0 Unknown

GW1 1 ≤ 3

GW1 2 > 3 and ≤ 18

GW1 3 > 18 and ≤ 25

GW1 4 > 25 and ≤ 50

GW1 5 > 50 and ≤ 75

GW1 6 > 75 and ≤ 100

GW1 7 > 100 and ≤ 142

GW1 8 > 142

GW1 9 Not Applicable

GW1 997 Unpopulated

GW1 999 Other

Name: Gap Width Range (2)

Code: GW2

Definition: Predominant horizontal gap width range (2) in meters, measured between the top of the first accessible break in slope above mean water level on each bank.

Domain: Enumerated

GW2 0 Unknown

GW2 1 > 18 and ≤ 142

GW2 2 > 142 and ≤ 1000

GW2 3 > 1000

GW2 4 NA

GW2 997 Unpopulated

GW2 999 Other

Code: GW3

Definition: The predominant horizontal gap width range with greater precision, measured between the top of the first accessible break in slope above mean water level on each bank.

Domain: Enumerated

GW3 0 Unknown

GW3 1 ≤ 1.5

GW3 2 > 1.5 and ≤ 3.0

GW3 3 > 3.0 and ≤ 18.0

GW3 4 > 18.0 and ≤ 25.0

GW3	5	>25.0 and <=30.0
GW3	6	>30.0 and <=35.0
GW3	7	>35.0 and <=40.0
GW3	8	>40.0 and <=45.0
GW3	9	>45.0 and <=50.0
GW3	10	>50.0 and <=75.0
GW3	11	>75.0 and <=100.0
GW3	12	>100.0 and <=142.0
GW3	13	>142.00
GW3	997	Unpopulated
GW3	998	Not Applicable
GW3	999	Other

Name: Horizontal Clearance Attribute

Code: HCA

Definition: The distance available to pass a load that extends laterally beyond the wheels of a vehicle.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Decimeters	Short Integer	-32767 to 32767	1 DM	N/A

Name: Horizontal Clearance Code

Code: HCC

Definition: The distance available to pass a load that extends laterally beyond the wheels of a vehicle.

Domain: Enumerated

HCC	0	Unknown
HCC	1	Restricted
HCC	2	Unlimited
HCC	997	Unpopulated
HCC	998	Not Applicable
HCC	999	Other

Name: Hydrographic Drying Height

Code: HDH

Definition: The height of the feature, which tidal waters cover and uncover, referenced to a specified vertical datum.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Hydrographic Depth/Height Information

Code: HDI

Definition: Information about the accuracy or availability of depth or uncovering height of a feature.

Domain: Enumerated

HDI	0	Unknown
HDI	9	Depth Known by Other Than Wire Drag
HDI	10	Depth Known by Wire Drag
HDI	11	Depth Unknown But Safe to Depth Shown
HDI	12	Depth Unknown
HDI	13	Uncovering Height Known
HDI	14	Uncovering Height Unknown
HDI	15	Not Applicable
HDI	997	Unpopulated
HDI	999	Other

Name: Hydrographic Depth

Code: HDP

Definition: The depth of the feature below water, measured from the top or surface of the feature, referenced to a specified vertical datum. Recorded values are positive numbers.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Hydrological Form Category

Code: HFC

Definition: Form or configuration of the hydrological feature.

Domain: Enumerated

HFC	0	Unknown
HFC	1	Channelized Stream
HFC	2	Disappearing
HFC	7	Non-Tidal
HFC	8	Normal Channel
HFC	10	Tidal/Tidal Fluctuating
HFC	14	Braided
HFC	16	Dissipating
HFC	19	Gorge
HFC	21	Wadi/Wash
HFC	30	Disappearing in sinkhole
HFC	31	Disappearing in other than sinkhole
HFC	32	Oxbow
HFC	33	Split stream
HFC	997	Unpopulated

HFC 998 Not Applicable
 HFC 999 Other

Name: Height Above Surface Level

Code: HGT

Definition: Distance measured from the lowest point of the base at ground or water level (downhill side/downstream side) to the tallest point of the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Height 2/Depth 2

Code: HGU

Definition: Height above water level on upstream side.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Harbour Identification Code

Code: HID

Definition: Identification code linking harbor to external database or reference.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Bank Height Left (1)

Code: HL1

Definition: Predominant height range (1) of the left bank (facing downstream) in meters, measured from mean water level to the first break in slope above the mean water level.

Domain: Enumerated

HL1 0 Unknown
 HL1 1 <= .5
 HL1 2 > .5 and <= 1.0
 HL1 3 > 1.0 and <= 5.0
 HL1 4 > 5.0
 HL1 5 Not Applicable
 HL1 997 Unpopulated
 HL1 999 Other

Name: Bank Height Left (2)

Code: HL2

Definition: Predominant height range (2) of the left bank (facing downstream) in meters, measured from mean water level to the first break in slope above the mean water level.

Domain: Enumerated

HL2	0	Unknown
HL2	1	<= 1
HL2	2	> 1 and <= 5
HL2	3	> 5
HL2	4	Not Applicable
HL2	997	Unpopulated
HL2	999	Other

Code: HL3

Definition: The predominant height range of the left bank (facing downstream) with greater precision, measured from mean water level to the top of the first accessible break in slope above the mean water level.

Domain: Enumerated

HL3	0	Unknown
HL3	1	<=0.2
HL3	2	>0.2 and <=0.5
HL3	3	>0.5 and <=1.0
HL3	4	>1.0 and <=1.5
HL3	5	>1.5 and <=2.0
HL3	6	>2.0 and <=5.0
HL3	7	>5.0
HL3	997	Unpopulated
HL3	998	Not Applicable
HL3	999	Other

Name: Hulk Type

Code: HLK

Definition: Classification of types of hulks or permanently moored ships.

Domain: Enumerated

HLK	0	Unknown
HLK	1	Floating Restaurant
HLK	2	Historic Ship
HLK	3	Museum
HLK	4	Accommodation
HLK	5	Floating Breakwater
HLK	997	Unpopulated
HLK	998	Not Applicable

HLK 999 Other

Name: Hydrographic Light Type

Code: HLT

Definition: The type of light used for marine navigation.

Domain: Enumerated

HLT	0	Unknown
HLT	1	Sectored Light
HLT	2	VALUE INTENTIONALLY LEFT BLANK (Other)
HLT	3	Moiré Effect Light
HLT	4	Strip Light
HLT	5	Occasional
HLT	6	Lighted Beacon
HLT	7	Directional Light
HLT	997	Unpopulated
HLT	998	Not Applicable
HLT	999	Other

Name: Hydrographic Origin Category

Code: HOC

Definition: Origin of the feature.

Domain: Enumerated

HOC	0	Unknown
HOC	1	Controlled
HOC	4	Man-Made
HOC	5	Natural
HOC	997	Unpopulated
HOC	998	Not Applicable
HOC	999	Other

Name: Horizontal Datum Classification

Code: HOD

Definition: Horizontal datum. (This attribute should only be used for a feature whose datum is different from that of the geo data set (see Part 3-6.2).) DO NOT USE - Replaced by HZD Horizontal Geodetic Datum in order to align the list of available datums with that in Part 3 of DIGEST.

Domain: Enumerated

HOD	0	Undefined
HOD	1	Adindan
HOD	2	Afgooye
HOD	3	Ain el Abd 1970
HOD	4	Anna 1 Astro 1965
HOD	5	Antigua Island Astro 1943
HOD	6	Arc 1950
HOD	7	Arc 1960

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Annex B-Attribute and Value Codes

HOD 8	Ascension Island 1958
HOD 9	Astro beacon "E" 1945
HOD 10	Astro DOS 71/4
HOD 11	Astro Tern Island (FRIG) 1961
HOD 12	Astronomical Station 1952
HOD 13	Australian Geodetic 1966
HOD 14	Australian Geodetic 1984
HOD 15	Ayabelle Lighthouse
HOD 16	Bellevue (IGN)
HOD 17	Bermuda 1957
HOD 18	Bissau
HOD 19	Bogota Observatory
HOD 20	Bukit Rimpah
HOD 21	Camp Area Astro
HOD 22	Campo Inchauspe
HOD 23	Canton Astro 1966
HOD 24	Cape
HOD 25	Cape Canaveral
HOD 26	Carthage
HOD 27	Chatham Island Astro 1971
HOD 28	Chua Astro
HOD 29	Corrego Alegre
HOD 30	Dabola
HOD 31	Djakarta (Batavia)
HOD 32	DOS 1968
HOD 33	Easter Island 1967
HOD 34	European 1950 (European Datum)
HOD 35	European 1979
HOD 36	Fort Thomas 1955
HOD 37	Gan 1970
HOD 38	Geodetic Datum 1949
HOD 39	Graciosa Base SW 1948
HOD 40	Guam 1963
HOD 41	Gunong Segara
HOD 42	GUX 1 Astro
HOD 43	Herat North
HOD 44	Hjörsey 1955
HOD 45	Hong Kong 1963
HOD 46	Hu-Tzu-Shan
HOD 47	Indian
HOD 48	Indian 1954
HOD 49	Indian 1975
HOD 50	Ireland 1965
HOD 51	ISTS 061 Astro 1968
HOD 52	ISTS 073 Astro 1969

HOD 53	Johnston Island 1961
HOD 54	Kandawala
HOD 55	Kerguelen Island 1949
HOD 56	Kertau 1948 (or Revised Kertau)
HOD 57	Kusaie Astro 1951
HOD 58	L. C. 5 Astro 1961
HOD 59	Leigon
HOD 60	Liberia 1964
HOD 61	Luzon
HOD 62	Mahe 1971
HOD 63	Massawa
HOD 64	Merchich
HOD 65	Midway Astro 1961
HOD 66	Minna
HOD 67	Montserrat Island Astro 1958
HOD 68	M'Poraloko
HOD 69	Nahrwan
HOD 70	Naparima, BWI
HOD 71	North American 1927
HOD 72	North American 1983
HOD 73	Observatorio Meteorologico 1939
HOD 74	Old Egyptian 1907
HOD 75	Old Hawaiian
HOD 76	Oman
HOD 77	Ordnance Survey of Great Britain 1936
HOD 78	Pico de las Nieves
HOD 79	Pitcairn Astro 1967
HOD 80	Point 58 Mean Solution
HOD 81	Pointe Noire 1948
HOD 82	Porto Santo 1936
HOD 83	Provisional South American 1956
HOD 84	Provisional South Chilean 1963 (also known as Hito XVIII 1963)
HOD 85	Puerto Rico
HOD 86	Qatar National
HOD 87	Qornoq
HOD 88	Reunion
HOD 89	Rome 1940 (or Monte Mario 1940)
HOD 90	Santo (DOS) 1965
HOD 91	Sao Braz
HOD 92	Sapper Hill 1943
HOD 93	Schwarzeck
HOD 94	Selvagem Grande 1938
HOD 95	South American 1969
HOD 96	South Asia
HOD 97	Tananarive Observatory 1925

HOD 98	Timbalai 1948
HOD 99	Tokyo
HOD 100	Tristan Astro 1968
HOD 101	Viti Levu 1916
HOD 102	Wake-Eniwetok 1960
HOD 103	Wake Island Astro 1952
HOD 104	WGS-72
HOD 105	WGS-84
HOD 106	Yacare
HOD 107	Zanderij
HOD 108	Potsdam Datum
HOD 109	American Samoa 1962
HOD 110	Deception Island
HOD 111	Indian 1960
HOD 112	Indonesian 1974
HOD 113	North Sahara 1959
HOD 114	Pulkovo 1942
HOD 115	S-42 (Pulkovo 1942)
HOD 116	S-JTSK
HOD 117	Voirol 1960
HOD 997	Unpopulated
HOD 998	Not Applicable
HOD 999	Other

Name: Hypsography Portrayal Category

Code: HQC

Definition: Type of line shown.

Domain: Enumerated

HQC 0	Unknown
HQC 1	Index
HQC 2	Intermediate
HQC 3	Supplementary (1/2)
HQC 4	Form Lines
HQC 5	Depression Index
HQC 6	Depression Intermediate
HQC 7	Approximate Index
HQC 8	Mound Index
HQC 9	Mound Intermediate
HQC 12	Intermediate Approximate
HQC 13	Supplementary Approximate
HQC 14	Supplementary (1/4)
HQC 15	Depression Approximate
HQC 16	Auxiliary
HQC 18	Intermediate Depression Approximate
HQC 19	Carrying Contour (coincident contours)

HQC	20	Supplemental Carrying Contour
HQC	21	Carrying Contour
HQC	22	Supplemental Depression
HQC	23	Supplemental Depression Approximate
HQC	98	Transition or erroneous
HQC	99	Connector
HQC	997	Unpopulated
HQC	998	Not Applicable
HQC	999	Other

Name: Bank height Right (1)

Code: HR1

Definition: Predominant height range (1) of the right bank (facing downstream) in meters, measured from mean water level to the first break in slope above the mean water level.

Domain: Enumerated

HR1	0	Unknown
HR1	1	<= .5
HR1	2	> .5 and <= 1.0
HR1	3	> 1.0 and <= 5.0
HR1	4	> 5.0
HR1	5	Not Applicable
HR1	997	Unpopulated
HR1	999	Other

Name: Bank Height Right (2)

Code: HR2

Definition: Predominant height range (2) of the right bank (facing downstream) in meters, measured from mean water level to the first break in slope above the mean water level.

Domain: Enumerated

HR2	0	Unknown
HR2	1	<= 1
HR2	2	> 1 and <= 5
HR2	3	> 5
HR2	4	Not Applicable
HR2	997	Unpopulated
HR2	999	Other

Code: HR3

Definition: The predominant height range of the right bank (facing downstream) with greater precision, measured from mean water level to the top of the first accessible break in slope above the mean water level.

Domain: Enumerated

HR3	0	Unknown
HR3	1	<=0.2

HR3	2	>0.2 and <=0.5
HR3	3	>0.5 and <=1.0
HR3	4	>1.0 and <=1.5
HR3	5	>1.5 and <=2.0
HR3	6	>2.0 and <=5.0
HR3	7	>5.0
HR3	997	Unpopulated
HR3	998	Not Applicable
HR3	999	Other

Name: Current Information (1)

Code: HS1

Definition: Month of appearance of the current.

Domain: Enumerated

HS1	0	Unknown/Not Applicable
HS1	1	Jan
HS1	2	Feb
HS1	3	Mar
HS1	4	Apr
HS1	5	May
HS1	6	Jun
HS1	7	Jul
HS1	8	Aug
HS1	9	Sep
HS1	10	Oct
HS1	11	Nov
HS1	12	Dec
HS1	997	Unpopulated
HS1	998	Not Applicable
HS1	999	Other

Name: Current Information (2)

Code: HS2

Definition: Month of disappearance of the current, if different from HS1.

Domain: Enumerated

HS2	0	Unknown/Not Applicable
HS2	1	Jan
HS2	2	Feb
HS2	3	Mar
HS2	4	Apr
HS2	5	May
HS2	6	Jun
HS2	7	Jul
HS2	8	Aug

HS2	9	Sep
HS2	10	Oct
HS2	11	Nov
HS2	12	Dec
HS2	997	Unpopulated
HS2	998	Not Applicable
HS2	999	Other

Name: Height Above Sea Bottom

Code: HSB

Definition: Vertical distance from sea bottom to lowest portion of feature.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Hospital Capacity

Code: HSC

Definition: Number of beds within a hospital.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Beds	Short Integer	-32767 to 32767	1 BED	N/A

Code: HTR

Definition: Height range with greater precision (in meters).

Domain: Enumerated

HTR	0	Unknown
HTR	1	<=0.5
HTR	2	>0.5 and <=1.0
HTR	3	>1.0 and <=1.5
HTR	4	>1.5 and <=2.0
HTR	5	>2.0 and <=5.0
HTR	6	>5.0 and <=10.0
HTR	7	>10.0 and <=20.0
HTR	8	>20.0 and <=35.0
HTR	9	>35.0
HTR	997	Unpopulated
HTR	998	Not Applicable
HTR	999	Other

Name: House of Worship Type

Code: HWT

Definition: Type of house of worship used.

Domain: Enumerated

HWT 0	Unknown
HWT 2	Cathedral
HWT 3	Chapel
HWT 4	Church
HWT 5	Marabout
HWT 6	Minaret
HWT 7	Monastery, Convent
HWT 9	Mosque
HWT 11	Pagoda
HWT 14	Shrine
HWT 15	Tabernacle
HWT 16	Temple
HWT 20	Synagogue
HWT 21	Stupa
HWT 22	Not Applicable
HWT 23	Any
HWT 997	Unpopulated
HWT 998	Not Applicable
HWT 999	Other

Name: Hydrological Category

Code: HYC

Definition: Identifies the annual water content of the feature.

Domain: Enumerated

HYC 0	Unknown
HYC 2	Not Applicable
HYC 3	Dry
HYC 6	Non-Perennial/Intermittent/Fluctuating
HYC 8	Perennial/Permanent
HYC 997	Unpopulated
HYC 999	Other

Code: HZD

Definition: Horizontal geodetic datum. (This attribute should only be used for a feature whose datum is different from that of the geo data set (see Part 3-6.2).)

Domain: Enumerated

HZD 0	Unknown
HZD 1	Adindan

HZD 2	Adindan (Ethiopia)
HZD 3	Adindan (Sudan)
HZD 4	Adindan (Mali)
HZD 5	Adindan (Senegal)
HZD 6	Adindan (Burkina Faso)
HZD 7	Adindan (Cameroon)
HZD 8	Adindan (Mean value: Ethiopia and Sudan)
HZD 9	Afgooye (Somalia)
HZD 10	Antigua Island Astro 1943
HZD 11	Ain el Abd 1970
HZD 12	Ain el Abd 1970 (Bahrain Island)
HZD 13	Ain el Abd 1970 (Saudi Arabia)
HZD 14	American Samoa Datum 1962
HZD 15	Amersfoort 1885/1903 (Netherlands)
HZD 16	Anna 1 Astro 1965 (Cocos Islands)
HZD 17	Approximate Luzon Datum (Philippines)
HZD 18	Arc 1950
HZD 19	Arc 1950 (Botswana)
HZD 20	Arc 1950 (Lesotho)
HZD 21	Arc 1950 (Malawi)
HZD 22	Arc 1950 (Swaziland)
HZD 23	Arc 1950 (Zaire)
HZD 24	Arc 1950 (Zambia)
HZD 25	Arc 1950 (Zimbabwe)
HZD 26	Arc 1950 (Burundi)
HZD 27	Arc 1950 (Mean value: Botswana, Lesotho, Malawi, Swaziland, Zaire, Zambia, and Zimbabwe)
HZD 28	Arc 1960
HZD 29	Arc 1960 (Kenya)
HZD 30	Arc 1960 (Tanzania)
HZD 31	Arc 1960 (Mean value: Kenya, Tanzania)
HZD 32	Arc 1935 (Africa)
HZD 33	Ascension Island 1958 (Ascension Island)
HZD 34	Montserrat Island Astro 1958
HZD 35	Astro Station 1952 (Marcus Island)
HZD 36	Astro Beacon "E" (Iwo Jima Island)
HZD 37	Average Terrestrial System 1977, New Brunswick
HZD 38	Australian Geod. 1966 (Australia and Tasmania Is.)
HZD 39	Australian Geod. 1984 (Australia and Tasmania Is.)
HZD 40	Djakarta (Batavia) (Sumatra Island, Indonesia)
HZD 41	Djakarta (Batavia) (Sumatra Island, Indonesia) with Zero Meridian Djakarta
HZD 42	Bekaa Base South End (Lebanon)
HZD 43	Belgium 1950 System (Lommel Signal, Belgium) See code ODU for Belgium 1972.
HZD 44	Bermuda 1957 (Bermuda Islands)
HZD 45	Bissau (Guinea-Bissau)

HZD 46	Modified BJZ54 (China)
HZD 47	BJZ54 (A954 Beijing Coordinates) (China)
HZD 48	Bogota Observatory (Colombia)
HZD 49	Bogota Observatory (Colombia) with Zero Meridian Bogota
HZD 50	Bern 1898 (Switzerland)
HZD 51	Bern 1898 (Switzerland) with Zero Meridian Bern
HZD 52	Bukit Rimpah (Bangka & Belitung Islands, Indonesia)
HZD 53	Cape Canaveral (Mean value: Florida and Bahama Islands)
HZD 54	Campo Inchauspe (Argentina)
HZD 55	Camacupa Base SW End (Campo De Aviacao, Angola)
HZD 56	Canton Astro 1966 (Phoenix Islands)
HZD 57	Cape (South Africa)
HZD 58	Camp Area Astro (Camp McMurdo Area, Antarctica)
HZD 59	S-JTSK, Czechoslovakia (prior to 1 Jan 1993)
HZD 60	Carthage (Tunisia)
HZD 61	Compensation Géodétique du Québec 1977
HZD 62	Chatham 1971 (Chatham Island, New Zealand)
HZD 63	Chua Astro (Paraguay)
HZD 64	Corrego Alegre (Brazil)
HZD 65	Conakry Pyramid of the Service Geographique (Guinea)
HZD 66	Guyana CSG67
HZD 67	Dabola (Guinea)
HZD 68	DCS-3 Lighthouse, Saint Lucia, Lesser Antilles
HZD 69	Deception Island, Antarctica
HZD 70	GUX 1 Astro (Guadacanal Island)
HZD 71	Dominica Astro M-12, Dominica, Lesser Antilles
HZD 72	Easter Island 1967 (Easter Island)
HZD 73	Wake-Eniwetok 1960 (Marshall Islands)
HZD 74	European 1950
HZD 75	European 1950 (Western Europe: Austria, Denmark, France, Federal Republic of Germany, Netherlands, and Switzerland)
HZD 76	European 1950 (Greece)
HZD 77	European 1950 (Norway and Finland)
HZD 78	European 1950 (Portugal and Spain)
HZD 79	European 1950 (Cyprus)
HZD 80	European 1950 (Egypt)
HZD 81	European 1950 (England, Channel Islands, Scotland, and Shetland Islands)
HZD 82	European 1950 (Iran)
HZD 83	European 1950 (Sardinia)
HZD 84	European 1950 (Sicily)
HZD 85	European 1950 (England, Channel Islands, Ireland, Northern Ireland, Scotland, Shetland Islands, and Wales)
HZD 86	European 1950 (Malta)
HZD 87	European 1950 (Mean value: Austria, Belgium, Denmark, Finland, France, Federal Republic of Germany, Gibraltar, Greece, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, & Switzerland)

HZD	88	European 1950 (Iraq, Israel, Jordan, Kuwait, Lebanon, Saudi Arabia, and Syria)
HZD	89	European 1950 (Tunisia)
HZD	90	European 1979 (Mean value: Austria, Finland, Netherlands, Norway, Spain, Sweden, and Switzerland)
HZD	91	European Terrestrial Reference System 1989 (ETRS89)
HZD	92	Oman (Oman)
HZD	93	Observatorio Meteorologico 1939 (Corvo and Flores Islands, Azores)
HZD	94	Fort Thomas 1955 (Nevis, St Kitts, Leeward Islands)
HZD	95	Gan 1970 (Addu Atoll, Republic of Maldives)
HZD	96	Gandajika Base (Zaire)
HZD	97	Geocentric Datum of Australia (GDA)
HZD	98	GDZ80 (China)
HZD	99	Geodetic Datum 1949 (New Zealand)
HZD	100	DOS 1968 (Gizo Island, New Georgia Islands)
HZD	101	Graciosa Base SW (Faial, Graciosa, Pico, Sao Jorge, and Terceira Island, Azores)
HZD	102	Greek Datum, Greece
HZD	103	Greek Geodetic Reference System 1987 (GGRS 87)
HZD	104	Gunong Segara (Kalimantan Island, Indonesia)
HZD	105	Gunong Serindung
HZD	106	Guam 1963
HZD	107	Herat North (Afganistan)
HZD	108	Hermannskogel
HZD	109	Provisional South Chilean 1963 (or Hito XVIII 1963) (S. Chile, 53°S)
HZD	110	Hjörsey 1955 (Iceland)
HZD	111	Hong Kong 1963 (Hong Kong)
HZD	112	Hong Kong 1929
HZD	113	Hu-Tzu-Shan
HZD	114	Hungarian 1972
HZD	115	Bellevue (IGN) (Efate and Erromango Islands)
HZD	116	Indonesian 1974
HZD	117	Indian
HZD	118	Indian (Thailand and Vietnam)
HZD	119	Indian (Bangladesh)
HZD	120	Indian (India and Nepal)
HZD	121	Indian (Pakistan)
HZD	122	Indian (1954)
HZD	123	Indian 1954 (Thailand)
HZD	124	Indian 1960
HZD	125	Indian 1960 (Vietnam: near 16°N)
HZD	126	Indian 1960 (Con Son Island (Vietnam))
HZD	127	Indian 1975
HZD	128	Indian 1975 (Thailand)
HZD	129	Ireland 1965 (Ireland and Northern Ireland)
HZD	130	ISTS 061 Astro 1968 (South Georgia Islands)
HZD	131	ISTS 073 Astro 1969 (Diego Garcia)

HZD	132	Johnston Island 1961 (Johnston Island)
HZD	133	Kalianpur (India)
HZD	134	Kandawala (Sri Lanka)
HZD	135	Kertau 1948 (or Revised Kertau) (West Malaysia and Singapore)
HZD	136	KCS 2, Sierra Leone
HZD	137	Kerguelen Island 1949 (Kerguelen Island)
HZD	138	Korean Geodetic System 1995 (South Korea)
HZD	139	KKJ (or Kartastokoordinaattijarjestelma), Finland
HZD	140	Kusaie Astro 1951
HZD	141	Kuwait Oil Company (K28)
HZD	142	L.C. 5 Astro 1961 (Cayman Brac Island)
HZD	143	Leigon (Ghana)
HZD	144	Liberia 1964 (Liberia)
HZD	145	Lisbon (Castelo di São Jorge), Portugal
HZD	146	Local Astro.
HZD	147	Loma Quintana (Venezuela)
HZD	148	Luzon
HZD	149	Luzon (Philipines except Mindanao Island)
HZD	150	Luzon (Mindanao Island)
HZD	151	Marco Astro (Salvage Islands)
HZD	152	Martinique Fort-Desaix
HZD	153	Massawa (Eritrea, Ethiopia)
HZD	154	Manokwari (West Irian)
HZD	155	Mayotte Combani
HZD	156	Mount Dillon, Tobago
HZD	157	Merchich (Morocco)
HZD	158	Midway Astro 1961 (Midway Island)
HZD	159	Mahe 1971 (Mahe Island)
HZD	160	Minna
HZD	161	Minna (Cameroon)
HZD	162	Minna (Nigeria)
HZD	163	Rome 1940 (or Monte Mario 1940), Italy
HZD	164	Rome 1940 (or Monte Mario 1940), Italy, with Zero Meridian Rome
HZD	165	Montjong Lowe
HZD	166	M'Poraloko (Gabon)
HZD	167	Viti Levu 1916 (Viti Levu Island, Fiji Islands)
HZD	168	Nahrwan
HZD	169	Nahrwan (Masirah Island, Oman)
HZD	170	Nahrwan (United Arab Emirates)
HZD	171	Nahrwan (Saudi Arabia)
HZD	172	Naparima (BWI, Trinidad and Tobago)
HZD	173	North American 1983
HZD	174	North American 1983 (Alaska, excluding Aleutian Islands)
HZD	175	North American 1983 (Canada)
HZD	176	North American 1983 (CONUS)

HZD	177	North American 1983 (Mexico and Central America))
HZD	178	North American 1983 (Aleutian Islands)
HZD	179	North American 1983 (Hawaii)
HZD	180	North American 1927
HZD	181	North American 1927 (Eastern US)
HZD	182	North American 1927 (Western US)
HZD	183	North American 1927 (Mean value: CONUS)
HZD	184	North American 1927 (Alaska)
HZD	185	North American 1927 (Mean value: Canada)
HZD	186	North American 1927 (Alberta and British Columbia)
HZD	187	North American 1927 (Newfoundland, New Brunswick, Nova Scotia and Quebec)
HZD	188	North American 1927 (Manitoba and Ontario)
HZD	189	North American 1927 (Northwest Territories and Saskatchewan)
HZD	190	North American 1927 (Yukon)
HZD	191	North American 1927 (Mexico)
HZD	192	North American 1927 (Central America - Belize, Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua)
HZD	193	North American 1927 (Canal Zone)
HZD	194	North American 1927 (Caribbean, Barbados, Caicos Islands, Cuba, Dominican Republic, Grand Cayman, Jamaica, Leeward Islands, and Turks Islands)
HZD	195	North American 1927 (Bahamas, except San Salvador Island)
HZD	196	North American 1927 (San Salvador Island)
HZD	197	North American 1927 (Cuba)
HZD	198	North American 1927 (Hayes Peninsula, Greenland)
HZD	199	North American 1927 (Aleutian Islands East of 180°W)
HZD	200	North American 1927 (Aleutian Islands West of 180°W)
HZD	201	Revised Nahrwan
HZD	202	New French or Nouvelle Triangulation Française (NTF) with Zero Meridian Paris
HZD	203	Alt: FDA
HZD	204	North Sahara 1959
HZD	205	Ocotopeque, Guatemala
HZD	206	Belgium 1972 (Observatoire d'Uccle)
HZD	207	Old Egyptian (Egypt)
HZD	208	Ordnance Survey of Great Britain 1936
HZD	209	Ordnance Survey G.B. 1936 (England)
HZD	210	Ordnance Survey G.B. 1936 (England, Isle of Man, and Wales)
HZD	211	Ordnance Survey G.B. 1936 (Scotland and Shetland Islands)
HZD	212	Ordnance Survey G.B. 1936 (Wales)
HZD	213	Ordnance Survey G.B. 1936 (Mean value: England, Isle of Man, Scotland, Shetland, and Wales)
HZD	214	Old Hawaiian
HZD	215	Old Hawaiian (Hawaii)
HZD	216	Old Hawaiian (Kauai)
HZD	217	Old Hawaiian (Maui)
HZD	218	Old Hawaiian (Oahu)
HZD	219	Old Hawaiian (Mean value)

HZD	220	Oslo Observatory (Old), Norway
HZD	221	Padang Base West End (Sumatra, Indonesia)
HZD	222	Padang Base West End (Sumatra, Indonesia) with Zero Meridian Djakarta
HZD	223	Palestine 1928 (Israel, Jordan)
HZD	224	Potsdam or Helmerdturm (Germany)
HZD	225	Ayabelle Lighthouse (Djibouti)
HZD	226	Pitcairn Astro 1967 (Pitcairn Island)
HZD	227	Pico de las Nieves (Canary Islands)
HZD	228	SE Base (Porto Santo) (Porto Santo & Madeira Islands)
HZD	229	Provisional South American 1956
HZD	230	Prov. S. American 1956 (Bolivia)
HZD	231	Prov. S. American 1956 (Northern Chile near 19°S)
HZD	232	Prov. S. American 1956 (Southern Chile near 43°S)
HZD	233	Prov. S. American 1956 (Columbia)
HZD	234	Prov. S. American 1956 (Ecuador)
HZD	235	Prov. S. American 1956 (Guyana)
HZD	236	Prov. S. American 1956 (Peru)
HZD	237	Prov. S. American 1956 (Venezuela)
HZD	238	Prov. S. American 1956 (Mean value: Bolivia, Chile, Colombia, Ecuador, Guyana, Peru, & Venezuela)
HZD	239	Point 58 Mean Solution (Burkina Faso and Niger)
HZD	240	Pointe Noire 1948
HZD	241	Pulkovo 1942 (Russia)
HZD	242	Puerto Rico (Puerto Rico and Virgin Islands)
HZD	243	Qatar National (Qatar)
HZD	244	Qornoq (South Greenland)
HZD	245	Rauenberg (Berlin, Germany)
HZD	246	Reconnaissance Triangulation, Morocco
HZD	247	Reunion 1947
HZD	248	RT90, Stockholm, Sweden
HZD	249	Santo (DOS) 1965 (Espirito Santo Island)
HZD	250	South African (South Africa)
HZD	251	Sainte Anne I 1984 (Guadeloupe)
HZD	252	South American 1969
HZD	253	South American 1969 (Argentina)
HZD	254	South American 1969 (Bolivia)
HZD	255	South American 1969 (Brazil)
HZD	256	South American 1969 (Chile)
HZD	257	South American 1969 (Columbia)
HZD	258	South American 1969 (Ecuador)
HZD	259	South American 1969 (Guyana)
HZD	260	South American 1969 (Paraguay)
HZD	261	South American 1969 (Peru)
HZD	262	South American 1969 (Baltra, Galapagos Islands)
HZD	263	South American 1969 (Trinidad and Tobago)

HZD	264	South American 1969 (Venezuela)
HZD	265	South American 1969 (Mean value: Argentina, Bolivia, Brazil, Chile, Columbia, Ecuador, Guyana, Paraguay, Peru, Trinidad and Tobago, and Venezuela)
HZD	266	Sao Braz (Sao Miguel, Santa Maria Islands, Azores)
HZD	267	Sapper Hill 1943 (East Falkland Islands)
HZD	268	Schwarzeck (Namibia)
HZD	269	Soviet Geodetic System 1985
HZD	270	Soviet Geodetic System 1990
HZD	271	Selvagem Grande 1938 (Salvage Islands)
HZD	272	Astro Dos 71/4 (St. Helena Island)
HZD	273	Sierra Leone 1960
HZD	274	South Asia (Southeast Asia, Singapore)
HZD	275	S-42 (Pulkovo 1942)
HZD	276	St. Pierre et Miquelon 1950
HZD	277	Stockholm 1938 (Sweden)
HZD	278	Sydney Observatory, New South Wales, Australia
HZD	279	Tananarive Observatory 1925
HZD	280	Tananarive Observatory 1925, with Zero Meridian Paris
HZD	281	Tristan Astro 1968 (Tristan da Cunha)
HZD	282	Timbalai 1948 (Brunei and East Malaysia - Sarawak and Sabah)
HZD	283	Timbali 1968
HZD	284	Tokyo
HZD	285	Tokyo (Japan)
HZD	286	Tokyo (Korea)
HZD	287	Tokyo (Okinawa)
HZD	288	Tokyo (Mean value: Japan, Korea, and Okinawa)
HZD	289	Trinidad 1903
HZD	290	Astro Tern Is. 1961 (Tern Island, Hawaii)
HZD	291	Undetermined or Unknown
HZD	292	Voirol 1875
HZD	293	Voirol 1875 with Zero Meridian Paris
HZD	294	Voirol 1960, Algeria
HZD	295	Voirol 1960, Algeria, with Zero Meridian Paris
HZD	296	Wake Island Astro 1952
HZD	297	World Geodetic System 1960
HZD	298	World Geodetic System 1966
HZD	299	World Geodetic System 1972
HZD	300	World Geodetic System 1984
HZD	301	Yacare (Uruguay)
HZD	302	Zanderij (Surinam)
HZD	303	Other Known Datum
HZD	997	Unpopulated
HZD	998	Not Applicable
HZD	999	Other

Name: IALA Aid Category

Code: IAC

Definition: Conformity of a navigational aid to the IALA system of navigational aids.

Domain: Enumerated

IAC	0	Unknown
IAC	1	Non-IALA Aid
IAC	2	IALA Aid
IAC	3	IALA Aid - Region A
IAC	4	IALA Aid - Region B
IAC	997	Unpopulated
IAC	998	Not Applicable
IAC	999	Other

Name: IMO Adoption Status

Code: IAS

Definition: Status of International Maritime Organization adoption. Replaced "Approved" with "Adopted"

Domain: Enumerated

IAS	0	Unknown
IAS	1	Adopted
IAS	2	Not Adopted
IAS	997	Unpopulated
IAS	998	Not Applicable
IAS	999	Other

Name: Installation Buoy Classification

Code: IBC

Definition: Tabulates the various types of installation buoys.

Domain: Enumerated

IBC	0	Undefined
IBC	1	Catenary Anchor Leg Mooring (CALM)
IBC	2	Single Buoy Mooring (SBM)
IBC	997	Unpopulated
IBC	998	Not Applicable
IBC	999	Other

Name: Ice Classification

Code: ICC

Definition: Tabulates the kind of ice.

Domain: Enumerated

ICC	0	Undefined
ICC	1	Fast ice
ICC	2	Sea ice
ICC	3	Growler area

ICC	4	Pancake ice
ICC	5	Glacier (see BJ030)
ICC	6	Ice Peak (see BJ060)
ICC	7	Pack ice (see BJ070)
ICC	8	Polar ice (see BJ080)
ICC	9	Debris-covered
ICC	997	Unpopulated
ICC	998	Not Applicable
ICC	999	Other

Name: Ice Factor

Code: ICE

Definition: The value of the maximum variation in the vertical clearance of an overhead cable due to an accumulation of ice.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	.1 M	N/A

Name: ICAO Airspace Classification

Code: ICL

Definition: ICAO designated airspace classification.

Domain: Enumerated

ICL	0	Unknown
ICL	1	Class A
ICL	2	Class B
ICL	3	Class C
ICL	4	Class D
ICL	5	Class E
ICL	6	Class F
ICL	7	Class G
ICL	997	Unpopulated
ICL	998	Not Applicable
ICL	999	Other

Name: Identification Number

Code: IDN

Definition: A unique number relating specific interior map/chart features to border information.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Short Integer	-32767 to 32767	1 Unit	N/A

Name: ICAO Designator

Code: IKO

Definition: International Civil Aviation Organization location identifier as designated in ICAO document 7910.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	256 Characters

Name: Inland Water Obstruction

Code: IWO

Definition: An indicator that a feature in an inland water body is an obstruction to vessel movement.

Domain: Enumerated

IWO	0	Unknown
IWO	1	Obstruction
IWO	2	Not an obstruction
IWO	997	Unpopulated
IWO	998	Not Applicable
IWO	999	Other

Name: Junction Connectivity Attribute

Code: JCR

Definition: Indicates whether or not all roads can be accessed from all other roads at a junction.

Domain: Enumerated

JCR	0	Unknown (ICA 0 IN DIGEST 2.0)
JCR	1	Full Connectivity (ICA 1 IN DIGEST 2.0)
JCR	2	Restricted Access (ICA 2 IN DIGEST 2.0)
JCR	997	Unpopulated
JCR	998	Not Applicable
JCR	999	Other

Name: Kilovolt Capacity Attribute

Code: KVA

Definition: Maximum voltage available on the line, as reported in kilovolts.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Kilovolts	Short Integer	N/A	1 KV	N/A

Name: Label of Feature

Code: LAB

Definition: Label applied to the feature.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Line Associated Features

Code: LAF

Definition: The type and/or number of features associated with a leading or clearing line.

Domain: Enumerated

LAF	0	Unknown
LAF	1	One Object (Other than a Directional Light)
LAF	2	Directional Light
LAF	3	Two or more lights
LAF	4	Two or more beacons
LAF	5	Two or More Objects (Other Than Two Lights or Beacons)
LAF	6	Measured Distance Markers
LAF	7	Directional Radiobeacon
LAF	8	Moiré Effect Light
LAF	997	Unpopulated
LAF	998	Not Applicable
LAF	999	Other

Name: Load Class Type 1

Code: LC1

Definition: Military Load Classification (weight bearing capacity) Type 1. (See STANAGs 2021 and 2253 for method of calculation)

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Military Load Class	Short Integer	0 to 999	1 LC	N/A

Name: Load Class Type 2

Code: LC2

Definition: Military Load Classification (weight bearing capacity) Type 2. (See STANAGs 2021 and 2253 for method of calculation)

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Military Load Class	Short Integer	0 to 999	1 LC	N/A

Name: Load Class Type 3

Code: LC3

Definition: Military Load Classification (weight bearing capacity) Type 3. (See STANAGs 2021 and 2253 for method of calculation)

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Military Load Class	Short Integer	0 to 999	1 LC	N/A

Name: Load Class Type 4

Code: LC4

Definition: Military Load Classification (weight bearing capacity) Type 4. (See STANAGs 2021 and 2253 for method of calculation)

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Military Load Class	Short Integer	0 to 999	1 LC	N/A

Name: Light Characteristic Number

Code: LCN

Definition: Number of flashes/occultations in a group flashing/occulting light character.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Occults	Short Integer	-32767 to 32767	1 OCCULT	N/A

Name: Length of Cab

Code: LEC

Definition: A measurement of the longer of two linear axes in meters of the pedestal or cab. For a square feature, measure either axis. For a round feature, measure the diameter.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Length/Diameter

Code: LEN

Definition: A measurement of the longer of two linear axes in meters. For a square feature, measure either axis. For a round feature, measure the diameter. For a bridge, the length is the distance between the bridge abutments.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Light Function Aeronautical

Code: LFA

Definition: Type of lighting provided or type of lighting system used.

Domain: Enumerated

LFA 0 Unknown

LFA	1	Airport Terminal Lights
LFA	2	Apron Flood
LFA	3	Boundary Lights
LFA	4	Runway Centerline Lighting
LFA	5	Runway End Identification Lighting (REIL)
LFA	6	Runway Lights/Runway Edge Lights
LFA	7	Sequenced Strobe
LFA	8	Taxiway Lighting
LFA	9	Visual Approach Slope Indicator (VASI)
LFA	10	Rotating Beacon
LFA	11	Obstruction Lighting
LFA	12	Threshold Light(s)
LFA	13	Touchdown Zone Lighting
LFA	14	Other Airport Lighting
LFA	15	ALSF-I (Approach Lighting System with seq. flashing)
LFA	16	ALSF-II
LFA	17	(SSALF)
LFA	18	(SSALR)
LFA	19	(MALSF)
LFA	20	(MALSR)
LFA	21	Landing Direction Indicator (LDIN)
LFA	22	RAIL (Runway Alignment Indicator Lights)
LFA	23	ODALS (Omni Directional Approach Landing System)
LFA	24	Other Approach Lighting
LFA	25	Precision Approach Path Indicator (PAPI)
LFA	26	Strobe
LFA	27	Runway Flood
LFA	28	Variable Intensity Runway Lights
LFA	29	Portable Runway Lights
LFA	30	Flares
LFA	31	Wind Indicator Lights
LFA	32	Visual Approach Slope Indicator (3 bar)
LFA	33	Optical Landing System
LFA	51	Aeronautical
LFA	52	Auxiliary
LFA	53	Beacon
LFA	54	VALUE INTENTIONALLY LEFT BLANK
LFA	55	Fishing
LFA	56	Fog Detector
LFA	57	Harbor
LFA	58	Horizontal
LFA	59	Obstruction
LFA	60	Occasional
LFA	61	Private
LFA	62	Range

LFA	63	Seasonal
LFA	64	Tidal
LFA	65	Vertical
LFA	66	Articulated
LFA	67	Primary
LFA	68	Secondary
LFA	69	Major
LFA	70	Minor
LFA	71	Visual Approach Slope Indicator (2 bar)
LFA	72	Identification Beacon
LFA	73	None available
LFA	100	Overrun centerline
LFA	101	Centerline and bar
LFA	102	U.S. Configuration (B)
LFA	103	Hong Kong Curve
LFA	104	Left single row
LFA	105	Center row
LFA	106	Former NATO standard
LFA	107	NATO standard
LFA	108	Center and double row
LFA	109	Portable approach
LFA	110	Center row (Cat 2 high visibility)
LFA	111	Center row (Cat 1 high intensity)
LFA	112	Navy parallel row and crossbar
LFA	113	Two parallel row
LFA	114	Left row (High intensity)
LFA	115	Air Force overrun
LFA	116	Calvert (British)
LFA	117	Single row centerline
LFA	118	Narrow multi cross
LFA	119	Centerline (High intensity approach lights)
LFA	120	Alternate centerline and bar approach lights
LFA	121	Cross
LFA	122	Neon ladder
LFA	123	Singapore centerline approach lights
LFA	124	Centerline 2 crossbars approach lights
LFA	125	T-VASI T-bar
LFA	126	PVASI pulsating
LFA	127	APAP alignment of elements systems
LFA	128	VASI (with indicator for threshold crossing height)
LFA	129	LCVASI low cost
LFA	130	High intensity runway lights
LFA	131	Medium intensity runway lights
LFA	132	Low intensity runway lights
LFA	997	Unpopulated

LFA 998 Not Applicable

LFA 999 Other

Name: Light Function Classification

Code: LFC

Definition: Tabulates the various functions of a light.

Domain: Enumerated

LFC 0 Undefined
 LFC 1 Direction function
 LFC 2 Rear/upper light
 LFC 3 Front/lower light
 LFC 4 Leading light
 LFC 5 Aerolight
 LFC 6 Air obstruction light
 LFC 7 Fog detector light
 LFC 8 Flood light
 LFC 9 Strip light
 LFC 10 Subsidiary light
 LFC 11 Spotlight
 LFC 12 Emergency
 LFC 13 Bearing Light
 LFC 997 Unpopulated
 LFC 998 Not Applicable
 LFC 999 Other

Name: Line Characteristic

Code: LNC

Definition: The characteristics of a line used during interpolation between two points.

Domain: Enumerated

LNC 0 Unknown
 LNC 1 Rhumb or Loxodrome Line
 LNC 2 Geodesic or Great Circle Line
 LNC 997 Unpopulated
 LNC 998 Not Applicable
 LNC 999 Other

Name: Location Category

Code: LOC

Definition: Status of feature relative to surrounding area or water.

Domain: Enumerated

LOC 0 Unknown
 LOC 1 Above Surface/Does not Cover (Height Known)
 LOC 2 Awash at Chart Datum
 LOC 3 Dries/Covers (Height Unknown)

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LOC 4	Below Water Surface
LOC 5	Covered < 20 Meters
LOC 6	Covered >= 20 Meters but < 30 Meters
LOC 7	Covered > = 30 Meters
LOC 8	On Ground Surface
LOC 9	Depth Known
LOC 10	Depth Known (Cleared by Drag Wire)
LOC 11	Depth Unknown But Safe to Depth Shown
LOC 12	VALUE INTENTIONALLY LEFT BLANK
LOC 13	Hull Showing
LOC 14	Masts Showing
LOC 15	On Water Surface/Floating
LOC 16	Partially Submerged
LOC 17	Sunken/On sea bottom
LOC 19	Above Surface/Does not Cover (Height Unknown)
LOC 20	Funnel Showing
LOC 21	Superstructure Showing
LOC 22	Off Shore
LOC 23	Below Sea Bottom
LOC 24	Suspended or Elevated above sea bottom
LOC 25	Suspended or Elevated Above Ground or Water Surface
LOC 28	Masts and Funnel Showing
LOC 30	Non-Floating
LOC 31	Elevated
LOC 32	Depressed
LOC 33	Not submerged
LOC 34	Inland
LOC 35	Overhead
LOC 36	Height Above Bottom
LOC 37	Exact Position Known
LOC 38	Exact Position Unknown
LOC 39	Depth Unknown
LOC 40	Underground
LOC 997	Unpopulated
LOC 998	Not Applicable
LOC 999	Other

Name: Length of Gradient

Code: LOG

Definition: The length of a segment having a gradient > =7 percent for a Road (AP030) or < =3 percent for a Railroad Track (AN010).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Length of Range

Code: LOR

Definition: Length of range, in nautical miles, established by aids to navigation on the shore.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Code: LRP

Definition: Length of range, in nautical miles, established by aids to navigation on the shore.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Floating Point	-32767 to 32767	NM	N/A

Name: Light Sector Angle

Code: LSA

Definition: Angular limits of light visibility. Limits of sectors and arcs of visibility are arranged clockwise and shall be given from seaward toward the light.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Light Sector Angle Initial

Code: LSI

Definition: Initial angular limit of light visibility. Limits of sectors and arcs of visibility are arranged clockwise and shall be given from seaward toward the light.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Light Sector Angle Terminal

Code: LST

Definition: Terminal angular limit of light visibility. Limits of sectors and arcs of visibility are arranged clockwise and shall be given from seaward toward the light.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Lane/Track Number

Code: LTN

Definition: The number of track(s) or lanes of the feature, including both directions.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Tracks/Lanes	Short Integer	-32767 to 32767	1 Track/Lane	N/A

Name: Light Range, Geographical

Code: LVG

Definition: The maximum distance at which light can theoretically reach an observer, as only at the curvature of the earth and the refraction of the atmosphere, and by the elevation of the light and height of eye of the observer.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Light Range, Luminous

Code: LVL

Definition: The maximum distance at which a light can be seen by the intensity of the light and meteorological visibility.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Light Range, Nominal

Code: LVN

Definition: The luminous range when the meteorological range is 10 sea miles.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Maximum Authorized Altitude

Code: MAA

Definition: The highest altitude in an airway or route at which adequate reception of navigation aid signals is assured.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	256 Characters

Name: Maritime Area Category

Code: MAC

Definition: Area in which certain activities or factors of significance to navigation or operations apply.

Domain: Enumerated

MAC 0	Unknown
MAC 1	Customs Area
MAC 2	Dredged Channel/Dredged Area
MAC 3	Harbor Area
MAC 4	Mine Danger Area
MAC 5	Prohibited Shipping Area/Entry Prohibited
MAC 6	Reclamation Area
MAC 7	Restricted Area
MAC 9	Works in Progress Area
MAC 10	Wire Drag Area/Swept Area
MAC 11	Anchorage (general)
MAC 12	Anchoring Berths
MAC 13	Explosives anchorage
MAC 14	Large Vessel/Deep Water/Deep Draft anchorage
MAC 15	Anchoring Prohibited
MAC 16	Quarantine Anchorage
MAC 17	Reserved Anchorage
MAC 18	Small Vessel Anchorage/Marina
MAC 19	Tanker Anchorage
MAC 20	Submarine Cable Area
MAC 21	Pipeline Area
MAC 22	Fishing Prohibited
MAC 23	Cable and Pipeline Area
MAC 24	Turning Area/Swinging Circle
MAC 25	Spoil Area/Spoil Ground (see OPS for status)
MAC 26	Unsurveyed Area
MAC 27	Submarine Exercise Area
MAC 28	Mine Laying Practice Area
MAC 29	Firing Danger Area
MAC 30	Dumping Ground for Hazardous Materials
MAC 31	Incineration Area
MAC 32	Oil Field
MAC 33	Gas Field
MAC 34	Historic Wreck
MAC 35	Explosive Dumping Ground
MAC 36	Former Mine Danger Area
MAC 37	Safety Zone
MAC 38	Chemical field
MAC 39	Separation Zone
MAC 40	Roundabout Zone (TSS)

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MAC 41	Inshore Traffic Zone (TSS)
MAC 42	Precautionary Area
MAC 43	Area to be avoided
MAC 44	Degaussing Range
MAC 45	Outfall Area
MAC 46	Intake Area
MAC 47	Fish Haven/Protected Area
MAC 48	Pilot Boarding Area
MAC 49	Cargo Transshipment Area
MAC 50	Red Rocks
MAC 51	Laterite
MAC 52	Evaporites
MAC 53	Seaplane
MAC 54	Time Limited
MAC 55	Fairway
MAC 56	Fish Trap Area
MAC 57	Marine Farm
MAC 58	Dredging Area
MAC 61	Sewer Area
MAC 79	Free Port Area
MAC 80	Fish Sanctuary
MAC 81	Degaussing Range (Do not use this value, use MAC 44)
MAC 82	Development Area
MAC 83	Diving prohibited zone
MAC 84	Danger of stranding area
MAC 85	Navigational aid safety zone
MAC 86	Historic wreck restricted area
MAC 87	Seal sanctuary
MAC 88	Game preserve
MAC 89	Bird sanctuary
MAC 90	Nature preserve
MAC 91	Practice area in general
MAC 92	Torpedo practice area
MAC 93	Anchorage for up to 24 hours
MAC 94	Small craft mooring area
MAC 95	Seaplane Anchorage
MAC 96	Unrestricted anchorage
MAC 97	Crossing (TSS)
MAC 98	Offshore Production Area
MAC 99	Dock Area
MAC 100	Caution Area
MAC 101	Marine Sanctuary
MAC 102	Waiting Area
MAC 103	Mineswept Channel
MAC 104	Major Navy Operating Area

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MAC 105	Minor Navy Operating Area
MAC 106	ASW Operating Area
MAC 107	Submarine Operating Area
MAC 108	Submarine Transit Lane (Submerged)
MAC 109	Submarine Transit Lane (Surface)
MAC 110	Surface Free Lane
MAC 111	Surface Operating Area (Major)
MAC 112	Surface Operating Area (Minor)
MAC 113	Anchoring and fishing prohibited
MAC 114	Sea Test Range
MAC 115	Submarine and Gunnery Exercise Area
MAC 116	Named Operating Area
MAC 117	Territorial Sea Area
MAC 118	Continental Shelf Area
MAC 119	Contiguous Zone
MAC 120	Exclusive Economic Zone
MAC 121	Fishery Zone
MAC 122	Fishing Ground
MAC 123	Caution Area
MAC 124	Vessel dumping ground
MAC 125	Military Practice Area
MAC 126	Swimming Area
MAC 127	Waiting Area
MAC 128	Research Area
MAC 129	Ecological Reserve
MAC 130	No Wake Area
MAC 131	Anchoring Restricted
MAC 132	Fishing Restricted
MAC 133	Trawling Prohibited
MAC 134	Trawling Restricted
MAC 135	Entry Restricted
MAC 136	Dredging Prohibited
MAC 137	Dredging Restricted
MAC 138	Diving Restricted
MAC 139	Construction Prohibited
MAC 140	Exercise Area Limit
MAC 141	Unexploded Ordinance
MAC 142	Submarine Warning Area
MAC 143	Naval Operations Area
MAC 144	Inwater Tracking Range
MAC 145	FORACS V Limits
MAC 146	Missile Test Area
MAC 147	Bombing and Strafing Targets Area
MAC 148	Drill Minefield
MAC 149	Abandoned Drill Minefield

- MAC 150 Acronym Area - Purple
- MAC 151 Acronym Area - Brown
- MAC 152 Acronym Area - Blue
- MAC 153 Landing Craft Air Cushion (LCAC)
- MAC 154 Area FOXTROT
- MAC 155 Submarine Danger Area
- MAC 156 Surface Ship Safety Lane
- MAC 157 Atlantic Fleet Weapons Range
- MAC 158 Naval Defense Sea Area
- MAC 159 UQC/WQC Test Area
- MAC 997 Unpopulated
- MAC 998 Not Applicable
- MAC 999 Other

Name: Magnetic Variation

Code: MAG

Definition: Horizontal angle between true north and magnetic north measured East (positive value) or West (negative value) according to whether magnetic north lies east or west of true north.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Degrees	Floating Point	-180 to 180	0.1 DEG	N/A

Name: Color of Navigation Mark Classification

Code: MAR

Definition: Tabulates colors of navigation marks.

Domain: Enumerated

- MAR 0 Undefined
- MAR 1 Green
- MAR 2 Black
- MAR 3 Red
- MAR 4 Yellow
- MAR 5 White
- MAR 6 Orange
- MAR 7 Black/yellow
- MAR 8 Black/yellow/black
- MAR 9 Yellow/black
- MAR 10 Yellow/black/yellow
- MAR 11 Red/white
- MAR 12 Green/red/green
- MAR 13 Red/green/red
- MAR 14 Black/red/black
- MAR 15 Yellow/red/yellow
- MAR 16 Green/red
- MAR 17 Red/green

MAR 997 Unpopulated
 MAR 998 Not Applicable
 MAR 999 Other

Name: Maintenance Status

Code: MAS

Definition: Indicates whether the feature is maintained.

Domain: Enumerated

MAS 0 Unknown
 MAS 1 Maintained
 MAS 2 Not Maintained
 MAS 997 Unpopulated
 MAS 998 Not Applicable
 MAS 999 Other

Name: Mine Attributes Classification

Code: MAT

Definition: Defines subsidiary mine attribute classifications and tabulates mine attributes.

Domain: Enumerated

MAT 0 Unknown
 MAT 1 Classification of mine identity (MID)
 MAT 2 Classification of mine status (MSC)
 MAT 3 Classification of mine position (MPC)
 MAT 4 Classification of mine special information (MSI)
 MAT 997 Unpopulated
 MAT 998 Not Applicable
 MAT 999 Other

Name: Military Bridge Information

Code: MBI

Definition: A free text field used to indicate if the bridge is subject to preplanned military interdiction.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Maritime Boundary Limit

Code: MBL

Definition: A line where on either side certain activities or factors of significance to navigation or operations apply.

Domain: Enumerated

MBL 0 Unknown
 MBL 1 COLREGS Demarcation Line
 MBL 2 Customs Boundary

- MBL 3 Fishing Zone Boundary
- MBL 4 Harbor Limit
- MBL 5 Separation Line (TSS)
- MBL 6 Territorial Waters-Limit of Sovereignty
- MBL 7 Territorial Waters Baseline
- MBL 8 Maritime Limit (General)
- MBL 9 International Boundary (at sea)
- MBL 10 Continental Shelf Boundary
- MBL 11 Limit of Exclusive Economic Zone
- MBL 12 Limit of Contiguous Zone
- MBL 13 Clearing Line
- MBL 14 Danger Line
- MBL 15 Armistice Boundary
- MBL 16 Gulf Stream Limits
- MBL 17 Three Nautical Mile Line
- MBL 18 Approximate Bathymetry
- MBL 98 Traffic Services Limit
- MBL 997 Unpopulated
- MBL 998 Not Applicable
- MBL 999 Other

Name: Morse Code Attribute

Code: MCA

Definition: The ASCII (ISO 646) letter that is being emitted by either the Navigation Signal Type (NST), Sound Signal Type (SST), Light Characteristic (CHA), or Electronic Beacon Type (BET).

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	80 Characters

Name: Material Composition Category

Code: MCC

Definition: Characteristics of primary material composition of feature.

Domain: Enumerated

- MCC 0 Unknown
- MCC 1 Aircraft
- MCC 2 Aluminum
- MCC 3 Ammunition
- MCC 4 Ash
- MCC 5 Asphalt
- MCC 6 Basalt
- MCC 7 Bedrock
- MCC 8 Boulders
- MCC 9 Brick
- MCC 10 Calcareous

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Annex B-Attribute and Value Codes

MCC 11	Cement
MCC 12	Chalk
MCC 13	Chemical
MCC 14	Cinders
MCC 15	Cirripedia
MCC 16	Clay
MCC 17	Coal
MCC 18	Cobble
MCC 19	Coke
MCC 20	Composition
MCC 21	Concrete
MCC 22	Conglomerate
MCC 23	Copper
MCC 24	Coral
MCC 25	Coral Head
MCC 26	Desalinated Water
MCC 27	Diamonds
MCC 28	Diatoms
MCC 29	Dolomite
MCC 30	Earthen
MCC 31	Electric
MCC 32	Eroded Lands
MCC 33	Explosives
MCC 34	Flysch
MCC 35	Food
MCC 36	Foraminifera
MCC 37	Fucus
MCC 38	Gas
MCC 39	Gasoline
MCC 40	Glass
MCC 41	Globigerina
MCC 42	Gold
MCC 43	Granite
MCC 44	VALUE INTENTIONALLY LEFT BLANK
MCC 45	Grass/Thatch
MCC 46	Gravel
MCC 47	Green Rocks
MCC 48	Ground
MCC 49	Ground (Shells)
MCC 50	Heat
MCC 51	Iron
MCC 52	Lava
MCC 53	VALUE INTENTIONALLY LEFT BLANK
MCC 54	Lead
MCC 55	Loess

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Annex B-Attribute and Value Codes

MCC 56	Lumber
MCC 57	Macadam
MCC 58	Madrepores
MCC 59	Manganese
MCC 60	Marble
MCC 61	Marl
MCC 62	Masonry (Brick/Stone)
MCC 63	Mattes
MCC 64	Metal
MCC 65	Mud
MCC 66	Mussels
MCC 67	Oil
MCC 68	Oil Blister
MCC 69	Ooze
MCC 70	Oysters
MCC 71	Paper
MCC 72	Part Metal
MCC 73	Pebbles
MCC 74	Plastic
MCC 75	Polyzoa
MCC 76	Porphyry
MCC 77	Prestressed Concrete
MCC 78	Pteropods
MCC 79	Pumice
MCC 80	Quartz
MCC 81	Radiolaria
MCC 82	Radioactive Material
MCC 83	Reinforced Concrete
MCC 84	Rock/Rocky
MCC 85	Rubber
MCC 86	Rubble
MCC 87	Salt
MCC 88	Sand
MCC 89	Sandstone
MCC 90	Schist
MCC 91	Spoils/Tailings
MCC 92	Scoria
MCC 93	Sea Tangle
MCC 94	Seaweed
MCC 95	Sewage
MCC 96	Shells
MCC 98	Shingle
MCC 99	Silt
MCC 100	Silver
MCC 101	Slag

MCC	102	Sludge
MCC	103	Snow/Ice
MCC	104	Soil
MCC	105	Spicules
MCC	106	Sponge
MCC	107	Steel
MCC	108	Stone
MCC	109	Sugar
MCC	110	Travertine
MCC	111	Tufa
MCC	112	Uranium
MCC	113	Vegetation Products
MCC	114	Volcanic
MCC	115	Volcanic Ash
MCC	116	Water
MCC	117	Wood
MCC	118	Zinc
MCC	119	Evaporites
MCC	120	Glass Reinforced Plastic (GRP)
MCC	997	Unpopulated
MCC	998	Not Applicable
MCC	999	Other

Name: Material Composition Secondary

Code: MCS

Definition: Secondary material composition of feature.

Domain: Enumerated

MCS	0	Unknown
MCS	4	Ash
MCS	8	Boulders
MCS	12	Chalk
MCS	14	Cinders
MCS	15	Cirripedia
MCS	16	Clay
MCS	18	Cobble
MCS	24	Coral
MCS	25	Coral Head
MCS	28	Diatoms
MCS	36	Foraminifera
MCS	37	Fucus
MCS	41	Globigerina
MCS	45	Grass /Thatch
MCS	46	Gravel
MCS	48	Ground
MCS	52	Lava

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Annex B-Attribute and Value Codes

MCS	55	Loess
MCS	58	Madrepores
MCS	59	Manganese
MCS	61	Marl
MCS	63	Mattes
MCS	65	Mud
MCS	66	Mussels
MCS	69	Ooze
MCS	70	Oysters
MCS	73	Pebbles
MCS	75	Polyzoa
MCS	78	Pteropods
MCS	79	Pumice
MCS	80	Quartz
MCS	81	Radiolaria
MCS	84	Rock/Rocky
MCS	88	Sand
MCS	90	Schist
MCS	92	Scoria
MCS	93	Sea Tangle
MCS	94	Seaweed
MCS	96	Shells
MCS	98	Shingle
MCS	99	Silt
MCS	104	Soil
MCS	105	Spicules
MCS	106	Sponge
MCS	108	Stone
MCS	111	Tufa
MCS	112	Uranium
MCS	113	Vegetation Products
MCS	114	Volcanic
MCS	115	Volcanic Ash
MCS	116	Water
MCS	117	Wood
MCS	118	Zinc
MCS	119	Evaporites
MCS	120	Glass Reinforced Plastic (GRP)
MCS	997	Unpopulated
MCS	998	Not Applicable
MCS	999	Other

Name: Mooring Connection Type

Code: MCT

Definition: Type of connection used in a mooring system.

Domain: Enumerated

MCT 0	Unknown
MCT 1	Mooring Cable/Chain
MCT 997	Unpopulated
MCT 998	Not Applicable
MCT 999	Other

Name: Material Composition Underlying

Code: MCU

Definition: Underlying material composition of feature.

Domain: Enumerated

MCU 0	Unknown
MCU 4	Ash
MCU 8	Boulders
MCU 12	Chalk
MCU 14	Cinders
MCU 15	Cirripedia
MCU 16	Clay
MCU 18	Cobble
MCU 24	Coral
MCU 25	Coral Head
MCU 28	Diatoms
MCU 36	Foraminifera
MCU 37	Fucus
MCU 41	Globigerina
MCU 45	Grass/Thatch
MCU 46	Gravel
MCU 48	Ground
MCU 52	Lava
MCU 58	Madrepores
MCU 59	Manganese
MCU 61	Marl
MCU 63	Mattes
MCU 65	Mud
MCU 66	Mussels
MCU 69	Ooze
MCU 70	Oysters
MCU 73	Pebbles
MCU 75	Polyzoa
MCU 78	Pteropods

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Annex B-Attribute and Value Codes

- MCU 79 Pumice
- MCU 80 Quartz
- MCU 81 Radiolaria
- MCU 84 Rock/Rocky
- MCU 88 Sand
- MCU 90 Schist
- MCU 92 Scoria
- MCU 93 Sea Tangle
- MCU 94 Seaweed
- MCU 96 Shells
- MCU 98 Shingle
- MCU 99 Silt
- MCU 105 Spicules
- MCU 106 Sponge
- MCU 108 Stone
- MCU 111 Tufa
- MCU 112 Uranium
- MCU 113 Vegetation Products
- MCU 114 Volcanic
- MCU 115 Volcanic Ash
- MCU 116 Water
- MCU 117 Wood
- MCU 118 Zinc
- MCU 119 Evaporites
- MCU 120 Glass Reinforced Plastic (GRP)
- MCU 997 Unpopulated
- MCU 998 Not Applicable
- MCU 999 Other

Name: Minimum Enroute Altitude

Code: MEA

Definition: The lowest altitude published by the host country between radio fixes which assures acceptable navigational signal coverage and meets obstacle clearing clearance requirements.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	80 Characters

Name: Median Category

Code: MED

Definition: Presence of a divider between multiple lanes/rails.

Domain: Enumerated

- MED 0 Unknown
- MED 1 With Median
- MED 2 Without Median

MED 6	Median Width <5 Meters
MED 7	Median Width >=5 Meters and <20 Meters
MED 8	Median Width >=20 Meters and <35 Meters
MED 9	Median Width >=35 Meters and <80 Meters
MED 10	Median Width >=80
MED 997	Unpopulated
MED 998	Not Applicable
MED 999	Other

Name: Maintenance Facilities Available

Code: MFA

Definition: Maintenance facilities available at or in the near vicinity.

Domain: Enumerated

MFA 0	Unknown
MFA 1	Ship maintenance and repair facilities
MFA 2	Ship construction
MFA 3	Barge maintenance and repair facilities
MFA 4	Barge construction
MFA 5	Locomotive maintenance and repair facilities
MFA 6	Locomotive construction
MFA 7	Aircraft maintenance and repair facilities
MFA 8	Aircraft construction
MFA 9	Road vehicle maintenance and repair facilities
MFA 10	Road vehicle construction
MFA 11	Ship salvage
MFA 12	Sailmaker
MFA 13	Inspection Ramp
MFA 14	Boat Hoist
MFA 15	General Mechanical fabrication
MFA 16	General Electrical fabrication
MFA 17	General Construction fabrication
MFA 995	None
MFA 997	Unpopulated
MFA 998	Not Applicable
MFA 999	Other

Name: Material Handling Facilities

Code: MHF

Definition: Material handling facilities available at or in the near vicinity.

Domain: Enumerated

MHF 0	Unknown
MHF 1	Bulk grain
MHF 2	Bulk ore
MHF 3	Container handling

MHF	4	Container trailer handling
MHF	5	Ro-Ro (Roll on Roll off)
MHF	6	Cranes
MHF	7	Bulk liquids
MHF	8	Bulk fuels
MHF	9	Rail transfer equipment
MHF	10	Civilian labor
MHF	11	Forklift trucks
MHF	12	Dock levelling facilities/vehicle or rail ramps
MHF	995	None
MHF	997	Unpopulated
MHF	998	Not Applicable
MHF	999	Other

Name: Mine Actuation Independent Influence Acoustic Classification

Code: MIA

Definition: Tabulates mine actuation independent influence acoustic types.

Domain: Enumerated

MIA	0	Unknown
MIA	1	Low freq.
MIA	2	Audio freq.
MIA	3	High freq.
MIA	4	Multiple freq.
MIA	997	Unpopulated
MIA	998	Not Applicable
MIA	999	Other

Name: Mine Actuation Independent Contact Classification

Code: MIC

Definition: Tabulates attributes of independent contact mine actuation.

Domain: Enumerated

MIC	0	Unknown
MIC	1	Plain
MIC	2	Snagline
MIC	3	Antenna
MIC	997	Unpopulated
MIC	998	Not Applicable
MIC	999	Other

Name: Mine Identity Classification

Code: MID

Definition: Tabulates mine identity attributes.

Domain: Enumerated

MID	0	Unknown
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MID 2 Friend
 MID 3 Hostile
 MID 4 Neutral
 MID 997 Unpopulated
 MID 998 Not Applicable
 MID 999 Other

Name: Mine Actuation Independent Influence Classification

Code: MII

Definition: Defines subsidiary mine actuation independent influence classifications and tabulates mine actuation independent influence types.

Domain: Enumerated

MII 0 Unknown
 MII 1 Pressure
 MII 2 Combined
 MII 3 Classif. of mine actuation independent influence magnetic (MIM)
 MII 4 Classif. of mine actuation independent influence acoustic (MIA)
 MII 997 Unpopulated
 MII 998 Not Applicable
 MII 999 Other

Name: Mine Actuation Independent Influence Magnetic Classification

Code: MIM

Definition: Tabulates mine actuation independent influence magnetic types.

Domain: Enumerated

MIM 0 Unknown
 MIM 1 Sensitive
 MIM 2 Mid-sensitive
 MIM 3 Course
 MIM 997 Unpopulated
 MIM 998 Not Applicable
 MIM 999 Other

Name: Mining Category

Code: MIN

Definition: Unique mining characteristic.

Domain: Enumerated

MIN 0 Unknown
 MIN 1 Borrow
 MIN 2 Horizontal Shaft
 MIN 3 Open Pit
 MIN 4 Placer
 MIN 5 Prospect
 MIN 6 Strip

- MIN 7 Vertical Shaft
- MIN 8 Peat Cuttings
- MIN 9 Below Surface Mine
- MIN 997 Unpopulated
- MIN 998 Not Applicable
- MIN 999 Other

Name: Mine Actuation Independent Other Classification

Code: MIO

Definition: Tabulates mine actuation, independent of other types.

Domain: Enumerated

- MIO 0 Unknown
- MIO 1 Electric Fields
- MIO 2 Laser Sensors
- MIO 3 Seismic
- MIO 4 Cosmic ray
- MIO 5 Infra red
- MIO 6 Redistribution
- MIO 7 Velocity field
- MIO 8 VALUE INTENTIONALLY LEFT BLANK (Other)
- MIO 997 Unpopulated
- MIO 998 Not Applicable
- MIO 999 Other

Name: Multiple Light Ranges

Code: MLR

Definition: A set of two numbers for light ranges of visibility (at a light) expressed in nautical miles; the numbers are separated by a slash (/) if only two visibilities exist, or by a dash (-) separating the greatest and least visibilities if three or more exist.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	256 Characters

Name: Mine Special Information Special Mine Types Classification

Code: MMT

Definition: Tabulates mine special information special mine types.

Domain: Enumerated

- MMT 0 Unknown
- MMT 1 Anti-sweeper
- MMT 2 Anti-hunter
- MMT 3 Anti-hovercraft
- MMT 4 Drill
- MMT 5 Explosive filled

MMT 6 Exercise filled
MMT 7 Exercise
MMT 8 Practice
MMT 9 Disposal Charge
MMT 997 Unpopulated
MMT 998 Not Applicable
MMT 999 Other

Name: Mine Actuation Classification

Code: MNA

Definition: Defines subsidiary mine actuation classifications and tabulates the Mine Actuation types.

Domain: Enumerated

MNA 0 Unknown
MNA 1 Classif. of mine actuation controlled (MNC)
MNA 2 Classif. of mine actuation independent (MNI)
MNA 3 Mine actuation no information
MNA 997 Unpopulated
MNA 998 Not Applicable
MNA 999 Other

Name: Mine Actuation Controlled Classification

Code: MNC

Definition: Defines subsidiary mine actuation classification controlled methods and classification.

Domain: Enumerated

MNC 0 Unknown
MNC 1 Mine actuation controlled cable
MNC 2 Classif. of mine actuation controlled cableless (MNL)
MNC 997 Unpopulated
MNC 998 Not Applicable
MNC 999 Other

Name: Mine Actuation Independent Classification

Code: MNI

Definition: Defines subsidiary mine actuation independent classifications.

Domain: Enumerated

MNI 0 Unknown
MNI 1 Classif. of mine actuation independent contact (MIC)
MNI 2 Classif. of mine actuation independent influence (MII)
MNI 3 Classif. of mine actuation independent other (MIO)
MNI 997 Unpopulated
MNI 998 Not Applicable
MNI 999 Other

Name: Mine Actuation Controlled Cableless Classification

Code: MNL

Definition: Tabulates the types of cableless controlled methods and classification.

Domain: Enumerated

- MNL 0 Unknown
- MNL 1 Frequency Communications Link
- MNL 2 Explicit Communications link
- MNL 3 Alternating Current Communications Link
- MNL 997 Unpopulated
- MNL 998 Not Applicable
- MNL 999 Other

Name: Minimum Obstruction Clearance

Code: MOC

Definition: The lowest published altitude in effect between radio fixes on VOR airways, off fairway routes, or route segments which meets obstacle clearance requirements for the entire route segment and which assures acceptable navigation signal.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Multiplicity of Lights

Code: MOL

Definition: The number of lights of identical character that exist as a co-located group.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Lights	Short Integer	0 to 32767	1 LTS	N/A

Name: Mine Position Classification

Code: MPC

Definition: Defines subsidiary mine position classifications and tabulates mine position types.

Domain: Enumerated

- MPC 0 Unknown
- MPC 1 Classif. of mine position ground (MPG)
- MPC 2 Classif. of mine position moored (MPM)
- MPC 3 Classif. of mine position other (MPO)
- MPC 4 Mine position no information
- MPC 997 Unpopulated
- MPC 998 Not Applicable
- MPC 999 Other

Name: Mine Position Ground Classification

Code: MPG

Definition: Tabulates ground mine charge size.

Domain: Enumerated

MPG 0	Unknown
MPG 1	<= 500 kg/charge
MPG 2	> 500 kg
MPG 997	Unpopulated
MPG 998	Not Applicable
MPG 999	Other

Name: Mine position Moored Classification

Code: MPM

Definition: Tabulates mine moored position types.

Domain: Enumerated

MPM 0	Unknown
MPM 1	Deep Moored
MPM 2	Short tethered
MPM 997	Unpopulated
MPM 998	Not Applicable
MPM 999	Other

Name: Mine Position Other Classification

Code: MPO

Definition: Tabulates other mine position types.

Domain: Enumerated

MPO 0	Unknown
MPO 1	Drifting
MPO 2	Oscillating
MPO 3	Creeping
MPO 4	Mobile
MPO 5	Homing
MPO 6	Rising
MPO 7	Bouquet
MPO 8	Active
MPO 997	Unpopulated
MPO 998	Not Applicable
MPO 999	Other

Name: Mine Status Classification

Code: MSC

Definition: Tabulates types of mine status.

Domain: Enumerated

MSC 0	Unknown
MSC 1	Afloat
MSC 2	Sunk
MSC 3	Disposed
MSC 4	Fouled
MSC 5	Exploded
MSC 6	Countermined
MSC 7	Neutralized
MSC 8	Rendered safe
MSC 9	Recovered
MSC 10	Removed
MSC 997	Unpopulated
MSC 998	Not Applicable
MSC 999	Other

Name: Mine Special Information Special Devices Classification

Code: MSD

Definition: Tabulates mine special information special devices types and subsidiary mine special information special devices classifications.

Domain: Enumerated

MSD 0	Unknown
MSD 1	Arming delay
MSD 2	Ship count
MSD 3	Intermittent arming
MSD 4	Delayed rising
MSD 5	Obstructors
MSD 6	Sterilizers
MSD 7	Flooders
MSD 8	Anti-watching
MSD 9	Classif. -mine special info special devices anti-sweep wire (MSW)
MSD 10	Classif. -mine special info special devices anti-recovery (MSR)
MSD 11	Classif. -mine special info special devices anti-hunting (MSH)
MSD 997	Unpopulated
MSD 998	Not Applicable
MSD 999	Other

Name: Mine Special Information Special Devices Anti-Hunting Classification

Code: MSH

Definition: Tabulates mine special information special devices anti-hunting types.

Domain: Enumerated

MSH 0	Unknown
MSH 1	Anechoic coating
MSH 2	Automatic mine burial
MSH 3	Irregular shaping

- MSH 4 Acoustic impedance
- MSH 5 Acoustic transparency
- MSH 6 Non-metallic case
- MSH 7 Sonar decoys
- MSH 8 VALUE INTENTIONALLY LEFT BLANK (Other)
- MSH 997 Unpopulated
- MSH 998 Not Applicable
- MSH 999 Other

Name: Mine Special Information Classification

Code: MSI

Definition: Defines subsidiary mine special information classifications.

Domain: Enumerated

- MSI 0 Unknown
- MSI 1 Classif. of mine special info usefulness (MSU)
- MSI 2 Classif. of mine special info special mine types (MMT)
- MSI 3 Classif. of mine special info special devices (MSD)
- MSI 997 Unpopulated
- MSI 998 Not Applicable
- MSI 999 Other

Name: Mine Special Information Special Devices Anti-Recovery Classification

Code: MSR

Definition: Tabulates mine special information special devices anti-recovery types.

Domain: Enumerated

- MSR 0 Unknown
- MSR 1 Switch
- MSR 2 Mooring level switch
- MSR 3 Stripping equipment
- MSR 4 VALUE INTENTIONALLY LEFT BLANK (Other)
- MSR 997 Unpopulated
- MSR 998 Not Applicable
- MSR 999 Other

Name: Missile Site Type

Code: MST

Definition: Class of missile at site.

Domain: Enumerated

- MST 0 Unknown
- MST 1 ABM
- MST 2 ICBM
- MST 3 IRBM
- MST 4 SA1
- MST 5 SA2

MST	6	SA3
MST	7	SA4
MST	8	SA5
MST	9	SA6
MST	10	SA7
MST	11	SA8
MST	12	SA9
MST	13	MRBM
MST	14	SSM
MST	15	SAM
MST	997	Unpopulated
MST	998	Not Applicable
MST	999	Other

Name: Mine Special Information Usefulness Classification

Code: MSU

Definition: Tabulates mine special information usefulness types.

Domain: Enumerated

MSU	0	Unknown
MSU	1	General purpose ground
MSU	2	Deep water
MSU	3	Medium depth anti-submarine
MSU	4	Continental shelf
MSU	5	Maritime anti-invasion
MSU	6	Anti-surface effect vehicle
MSU	997	Unpopulated
MSU	998	Not Applicable
MSU	999	Other

Name: Mine Special Information Special Devices Anti-Sweep Wire Classification

Code: MSW

Definition: Tabulates mine special information special devices anti-sweep wire types.

Domain: Enumerated

MSW	0	Unknown
MSW	1	Chain moorings
MSW	2	Sprocket
MSW	3	Grapnel
MSW	4	Cutters
MSW	5	Sensitive Tubing
MSW	6	VALUE INTENTIONALLY LEFT BLANK (Other)
MSW	997	Unpopulated
MSW	998	Not Applicable
MSW	999	Other

Name: Mast Type Category

Code: MTC

Definition: Type of mast.

Domain: Enumerated

MTC	0	Unknown
MTC	1	Communication Mast
MTC	2	Television Mast
MTC	3	Radio Mast
MTC	4	Light Support Mast
MTC	5	Microwave Mast
MTC	997	Unpopulated
MTC	998	Not Applicable
MTC	999	Other

Name: Mine Track Number

Code: MTN

Definition: Mine track Number. Expressed by a track number of 4 digits.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Track Number	Short Integer	-9999 to 9999	1 TRACK No.	N/A

Name: Maritime Track Type

Code: MTT

Definition: Defines restrictions, direction and other characteristics of maritime tracks.

Domain: Enumerated

MTT	0	Unknown
MTT	1	Based on Fixed Marks
MTT	2	Not Based on Fixed Marks
MTT	3	Maximum Authorized Draft
MTT	4	Mandatory Direction
MTT	5	Recommended Direction
MTT	997	Unpopulated
MTT	998	Not Applicable
MTT	999	Other

Name: Maximum Vertical Clearance

Code: MVC

Definition: The greatest distance between the traveled way and any obstruction vertically above it.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Mooring / Warping Facility Classification

Code: MWF

Definition: Tabulates mooring/warping facility types.

Domain: Enumerated

MWF 0	Unknown
MWF 1	Undefined
MWF 2	Dolphin
MWF 3	Deviation dolphin
MWF 4	Bollard
MWF 5	Tie-up Wall
MWF 6	Post or Pile
MWF 997	Unpopulated
MWF 998	Not Applicable
MWF 999	Other

Name: Median Width with Greater Precision

Code: MW

Definition: The measured distance at map scale between connecting, adjacent and two-way road centerlines having divided roadbeds.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Second Name

Code: NA2

Definition: Fundamentally a touristic name for a feature which exists in addition to a geographic name.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Classification Name

Code: NA3

Definition: Fundamentally a grammalogue, index number, order or classification number for a feature.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Country Code

Code: NA4

Definition: A four character country identification code as designated in FIPS Pub 10-4, Countries, Dependencies, Areas of Special Sovereignty, and their Principal Administrative Divisions, identifying the country and the principal administrative division in which the feature is located. The last two characters will be blank filled if principal administrative division information is not required.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	4 Characters

Name: Name

Code: NAM

Definition: Any Identifier or code.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Native Settlement Type

Code: NAS

Definition: The distribution of native dwellings within the delineated area of the feature.

Domain: Enumerated

NAS	0	Unknown
NAS	1	Centralized Habitation
NAS	2	Continuous Habitation
NAS	997	Unpopulated
NAS	998	Not Applicable
NAS	999	Other

Name: Navigation Line Classification

Code: NLC

Definition: Tabulates navigation line types.

Domain: Enumerated

NLC	0	Unknown
NLC	1	Undefined
NLC	2	Clearing line
NLC	3	Transit line
NLC	997	Unpopulated
NLC	998	Not Applicable
NLC	999	Other

Name: Name 3

Code: NM3

Definition: Name of the political entity on one side (relative to NM4) of a boundary line.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Name 4

Code: NM4

Definition: Name of the political entity on the other side (relative to NM3) of a boundary line.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Navigation Mark System

Code: NMS

Definition: Indicates the specific navigation marks system.

Domain: Enumerated

NMS 0	Undefined
NMS 1	IALA A
NMS 2	IALA B
NMS 3	Modified U.S.
NMS 4	Old U.S.
NMS 5	U.S. Intracoastal waterway
NMS 6	U.S. uniform state
NMS 7	U.S. Western rivers
NMS 8	SIGNI
NMS 9	No System
NMS 10	Other System
NMS 997	Unpopulated
NMS 998	Not Applicable
NMS 999	Other

Name: Number of Platforms

Code: NOP

Definition: The number of platforms at a railway station or similar facility.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Platforms	Short Integer	-32767 to 32767	1 PLATFORM	N/A

Name: Number of Spans

Code: NOS

Definition: Number of spans in a bridge or aqueduct.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Spans	Short Integer	-32767 to 32767	1 SPAN	N/A

Name: Number of Parallel Lines

Code: NPL

Definition: Total number of parallel lines within the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Lines	Short Integer	-32767 to 32767	1 LINE	N/A

Name: Navigation System Types (2)

Code: NS2

Definition: Type of equipment or system used in electronic navigation (secondary system).

Domain: Enumerated

NS2	0	Unknown
NS2	1	Circular Radio Beacon
NS2	2	CONSOL
NS2	3	DECCA
NS2	4	Radio Direction Finding
NS2	5	Directional Radio Beacon
NS2	6	Distance Finding
NS2	7	Long Range Air Navigation System (LORAN)
NS2	8	OMEGA
NS2	9	VALUE INTENTIONALLY LEFT BLANK (OTHER)
NS2	10	Radar Responder Beacon (RACON)
NS2	11	Radar
NS2	12	Radio
NS2	13	Radio Telephone
NS2	14	VALUE INTENTIONALLY LEFT BLANK
NS2	15	TV
NS2	16	Microwave
NS2	17	Non-Directional Radio Beacon (NDB)
NS2	18	NDB/Distance Measuring Equipment (NDB/DME)
NS2	19	Radio Range (RNG)
NS2	20	VHF Omni Directional Radio Range (VOR)
NS2	21	VHF Omni Directional (VOR /DME)
NS2	22	VHF Omni Directional (VORTAC)

NS2	23	Tactical Air Navigation Equipment (TACAN)
NS2	24	Instrument Landing System (ILS)
NS2	25	Instrument Landing System/Distance Measuring Equipment (ILS/DME)
NS2	26	Localizer (LOC)
NS2	27	Localizer/Distance Measuring Equipment (LOC/DME)
NS2	28	Simplified Directional Facility (SDF)
NS2	29	Landing Distance Available (LDA)
NS2	30	Microwave Landing System (MLS)
NS2	31	Fan Marker
NS2	32	Bone Marker
NS2	33	Radio Telegraph
NS2	34	Ground Controlled Approach (GCA)
NS2	35	Radar Antenna
NS2	37	Precision Approach Radar (PAR)
NS2	38	Aeronautical Radio
NS2	39	VALUE INTENTIONALLY LEFT BLANK
NS2	40	Radio Beacon
NS2	41	Rotating Loop Radio Beacon
NS2	42	Visual Flight Rules (VFR) Test Signal Maker
NS2	43	VALUE INTENTIONALLY LEFT BLANK
NS2	44	Console Radio Beacon
NS2	45	Radar Station
NS2	46	Aeronautical Radio Range
NS2	47	Hifix
NS2	48	Hyperfix
NS2	49	Tricolor Panel
NS2	50	Radio station
NS2	51	Radiobeacon, Type Unknown
NS2	52	None
NS2	53	QTG Station (R)
NS2	54	Ramark (Ramark)
NS2	55	Radar reflector
NS2	56	LO (Locator)
NS2	57	LLZ (Localizer)
NS2	58	DME (Distance Measuring Equipment)
NS2	997	Unpopulated
NS2	998	Not Applicable
NS2	999	Other

Name: Navigation System Types

Code: NST

Definition: Type of equipment or system used in electronic navigation (primary system).

Domain: Enumerated

NST	0	Unknown
NST	1	Circular Radio Beacon

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NST	2	CONSOL
NST	3	DECCA
NST	4	Radio Direction Finding
NST	5	Directional Radio Beacon
NST	6	Distance Finding
NST	7	Long Range Air Navigation System (LORAN)
NST	8	OMEGA
NST	9	VALUE INTENTIONALLY LEFT BLANK (Other)
NST	10	Radar Responder Beacon (RACON)
NST	11	Radar
NST	12	Radio
NST	13	Radio Telephone
NST	14	VALUE INTENTIONALLY LEFT BLANK
NST	15	TV
NST	16	Microwave
NST	17	Non-Directional Radio Beacon (NDB)
NST	18	NDB/Distance Measuring Equipment (NDB/DME)
NST	19	Radio Range (RNG)
NST	20	VHF Omni Directional Radio Range (VOR)
NST	21	VHF Omni Directional (VOR/DME)
NST	22	VHF Omni Directional (VORTAC)
NST	23	Tactical Air Navigation Equipment (TACAN)
NST	24	Instrument Landing System (ILS)
NST	25	Instrument Landing System/Distance Measuring Equipment (ILS/DME)
NST	26	Localizer (LOC)
NST	27	Localizer/Distance Measuring Equipment (LOC/DME)
NST	28	Simplified Directional Facility (SDF)
NST	29	Landing Distance Available (LDA)
NST	30	Microwave Landing System (MLS)
NST	31	Fan Marker
NST	32	Bone Marker
NST	33	Radio Telegraph
NST	34	Ground Controlled Approach (GCA)
NST	35	Radar Antenna
NST	37	Precision Approach Radar (PAR)
NST	38	Aeronautical Radio
NST	39	VALUE INTENTIONALLY LEFT BLANK
NST	40	Radio Beacon
NST	41	Rotating Loop Radio Beacon
NST	42	Visual Flight Rules (VFR) Test Signal Maker
NST	43	VALUE INTENTIONALLY LEFT BLANK
NST	44	Consol Radio Beacon
NST	45	Radar Station
NST	46	Aeronautical Radio Range
NST	47	Hifix

NST	48	Hyperfix
NST	49	Tricolor Panel
NST	50	Radio station
NST	51	Radiobeacon, Type Unknown
NST	52	None
NST	53	QTG Station (R)
NST	54	Ramark (Ramark)
NST	55	Radar reflector
NST	56	LO (Locator)
NST	57	LLZ (Localizer)
NST	58	DME (Distance Measuring Equipment)
NST	59	Differential GPS
NST	60	Toran
NST	61	Syledis
NST	62	Chaika (Chayka)
NST	997	Unpopulated
NST	998	Not Applicable
NST	999	Other

Name: Oil Barrier Classification

Code: OBC

Definition: Tabulates types of oil barriers.

Domain: Enumerated

OBC	0	Undefined
OBC	1	Oil retention (high pressure pipe)
OBC	2	Floating oil barrier
OBC	997	Unpopulated
OBC	998	Not Applicable
OBC	999	Other

Name: Overhead Clearance Category Code

Code: OCC

Definition: The coded distance between the traveled way and any obstruction vertically above it. (Ref. STANAG 2253).

Domain: Enumerated

OCC	0	Unknown
OCC	1	Restricted
OCC	2	Unlimited
OCC	997	Unpopulated
OCC	998	Not Applicable
OCC	999	Other

Name: Opposite Direction of Flow

Code: ODF

Definition: Opposite direction of flow value of air route segments.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Overall Height of Bridge

Code: OHB

Definition: Vertical distance measured from the lowest point at ground or water level to the highest portion of bridge (including superstructure).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Overhead Clearance Category

Code: OHC

Definition: The least distance between the traveled way and any obstruction vertically above it. (Ref. STANAG 2253)

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Derived Obstacle Height/Depth Category

Code: OHD

Definition: Categorized maximum height or depth of an obstacle feature, in meters, with delineated segment of area.

Domain: Enumerated

OHD 0	Unknown
OHD 1	>1.5 and <=5.0
OHD 2	>5.0 and <=10.0
OHD 3	>10.0 and <=20.0
OHD 4	>20.0 and <=40.0
OHD 5	>40.0
OHD 997	Unpopulated
OHD 998	Not Applicable
OHD 999	Other

Name: Obstruction Light Quality

Code: OLQ

Definition: Indicates whether single or multiple obstruction lights are present.

Domain: Enumerated

OLQ	0	Unknown
OLQ	1	One Light Present
OLQ	2	Multiple Lights Present
OLQ	997	Unpopulated
OLQ	998	Not Applicable
OLQ	999	Other

Name: Overhead Obstruction Category

Code: OOC

Definition: Type of overhead obstruction.

Domain: Enumerated

OOO	0	Unknown
OOO	1	Viaduct, frame construction
OOO	2	Viaduct, arc construction
OOO	3	Roof
OOO	4	Powerline of railway
OOO	5	High-Tension powerline
OOO	6	Bridge Superstructure
OOO	997	Unpopulated
OOO	998	Not Applicable
OOO	999	Other

Name: Offshore Platform Classification

Code: OPC

Definition: Tabulates types of offshore platforms.

Domain: Enumerated

OPC	0	Undefined
OPC	1	Oil derrick/rig
OPC	2	Production Platform
OPC	3	Observation/Research Platform
OPC	4	Articulated Loading Platform (ALP)
OPC	5	Single anchor leg mooring (SALM)
OPC	6	Mooring Tower
OPC	7	Artificial Island
OPC	8	Floating production, storage and off-loading vessel (FPSO)
OPC	9	Accommodation Platform
OPC	997	Unpopulated
OPC	998	Not Applicable
OPC	999	Other

Name: Operational Status

Code: OPS

Definition: Indicates whether or not the feature is in operation.

Domain: Enumerated

OPS 0 Unknown
 OPS 1 Operational
 OPS 2 Non-Operational
 OPS 997 Unpopulated
 OPS 998 Not Applicable
 OPS 999 Other

Name: Operations Times

Code: OPT

Definition: The operating times for facilities, airspace, etc.

Domain: Enumerated

OPT 0 Unknown
 OPT 1 Daytime (Sunrise/Sunset)
 OPT 2 Nighttime
 OPT 3 Continuous
 OPT 4 Summertime (April-October)
 OPT 5 Wintertime (November-March)
 OPT 997 Unpopulated
 OPT 998 Not Applicable
 OPT 999 Other

Name: Operating Range Category (2)

Code: OR2

Definition: The secondary range of the NAVAID beyond which the capture of the signal is not completely assured.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Operating Range Category

Code: ORC

Definition: The range of the NAVAID beyond which the capture of the signal is not completely assured.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Ordinal Category

Code: ORD

Definition: Indicator of relative importance of a feature

Domain: Enumerated

ORD	0	Unknown
ORD	1	Primary/1st Order
ORD	2	Secondary/2nd Order
ORD	3	Tertiary/3rd Order
ORD	4	Quaternary/4th Order
ORD	5	Quintary/5th Order
ORD	997	Unpopulated
ORD	998	Not Applicable
ORD	999	Other

Name: Operating Restrictions

Code: ORS

Definition: Times or conditions during which the use of a feature is restricted.

Domain: Enumerated

ORS	0	Unknown
ORS	1	Daytime operations only (Sunrise/Sunset)
ORS	2	Nighttime
ORS	3	Continuous operations
ORS	4	Susceptible to snow
ORS	5	Susceptible to ice
ORS	6	Susceptible to flooding
ORS	996	Special restrictions apply, see TXT
ORS	997	Unpopulated
ORS	998	Not Applicable
ORS	999	Other

Name: Over Water Obstruction

Code: OWO

Definition: Indicates the presence of an obstruction over an area of navigable water.

Domain: Enumerated

OWO	0	Unknown
OWO	1	Feature crosses navigable water
OWO	2	Feature does not cross navigable water
OWO	997	Unpopulated
OWO	998	Not Applicable
OWO	999	Other

Name: Buoy Pattern Category

Code: PAT

Definition: The color breakdown of pattern of buoy.

Domain: Enumerated

- PAT 0 Unknown
- PAT 1 Checkered
- PAT 2 Diagonal Bands
- PAT 3 Single Color
- PAT 4 Horizontal Bands
- PAT 5 VALUE INTENTIONALLY LEFT BLANK
- PAT 6 Vertical Stripes
- PAT 7 Stripes (Direction Unknown)
- PAT 8 Border Stripe
- PAT 98 Squared
- PAT 99 Horizontal bands from top to bottom
- PAT 997 Unpopulated
- PAT 998 Not Applicable
- PAT 999 Other

Name: Pilot Boarding Place Classification

Code: PBP

Definition: Tabulates types of pilot boarding place.

Domain: Enumerated

- PBP 0 Undefined
- PBP 1 Boarding by pilot-cruising vessel
- PBP 2 Boarding by helicopter
- PBP 3 Pilot comes out from shore
- PBP 997 Unpopulated
- PBP 998 Not Applicable
- PBP 999 Other

Name: Pilot Boarding Vehicle

Code: PBV

Definition: The method by which pilots are transferred to and from ships using pilot services.

Domain: Enumerated

- PBV 0 Unknown
- PBV 1 By Boat
- PBV 2 By Helicopter
- PBV 997 Unpopulated
- PBV 998 Not Applicable
- PBV 999 Other

Name: Percentage Content

Code: PCC

Definition: Percentage of total composition.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	-32767 to 32767	1 %	N/A

Name: Point of Change Identifier

Code: PCI

Definition: Identifies category of feature associated with a point of change.

Domain: Enumerated

PCI	0	Unknown
PCI	1	Transportation / road or railroad
PCI	2	Hydrography / drainage
PCI	3	Boundaries
PCI	4	Road width change
PCI	5	Obstacles
PCI	997	Unpopulated
PCI	998	Not Applicable
PCI	999	Other

Name: Pedestrian Capacity

Code: PCU

Definition: Number of pedestrians a feature can accommodate.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Persons	Short Integer	-32767 to 32767	1 PERSON	N/A

Code: PDE

Definition: The end of the active period for a seasonal object (e.g. a buoy). Coded YYYYMMDD.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	8 Characters

Name: Pedestrian Rate

Code: PDR

Definition: Number of pedestrians per time unit (this attribute utilizes the structured text approach), e.g. 10(persons)[per hour].

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	80 Characters

Code: PDS

Definition: The start of the active period for a seasonal object (e.g. a buoy). Coded YYYYMMDD.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	8 Characters

Name: Period of Light

Code: PER

Definition: The time occupied by an entire cycle of intervals of light and eclipse.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Seconds	Floating Point	N/A	0.1 Second	N/A

Name: Position Evaluation

Code: PEV

Definition: Evaluation of the position accuracy of a Non-submarine contact. Reference STANAG 3715.

Domain: Enumerated

PEV	0	Unknown
PEV	1	Accuracy <= 1 nautical mile
PEV	2	Accuracy > 1 nautical mile and <= 3 nautical miles
PEV	3	Accuracy > 3 nautical miles and <= 5 nautical miles
PEV	4	Accuracy > 5 nautical miles and <= 10 nautical miles
PEV	5	Accuracy uncertain
PEV	997	Unpopulated
PEV	998	Not Applicable
PEV	999	Other

Name: Predominant Feature Depth

Code: PFD

Definition: Predominant Depth within delineation of feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Code: PFE
 Definition: Predominant depth within the delineation of feature.
 Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	.01 M	N/A

Code: PFG
 Definition: Predominant height within delineation of feature.
 Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	.01 M	N/A

Name: Predominant Feature Height
 Code: PFH
 Definition: Predominant height within delineation of feature.
 Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Predominant Height (10 m Range)
 Code: PH4
 Definition: Predominant height range of a specified urban area (reported in 10 meter ranges).
 Domain: Enumerated

- PH4 0 Unknown
- PH4 1 <= 10
- PH4 2 > 10 and <= 20
- PH4 3 > 20 and <= 30
- PH4 4 > 30 and <= 40
- PH4 5 > 40 and <= 50
- PH4 6 > 50 and <= 60
- PH4 7 > 60 and <= 70
- PH4 8 > 70 and <= 80
- PH4 9 > 80 and <= 90
- PH4 10 > 90 and <= 100
- PH4 11 > 100
- PH4 12 Not Applicable
- PH4 997 Unpopulated
- PH4 999 Other

Name: Predominant Height

Code: PHT

Definition: Height of 51% or more of the feature. If not obtainable, then the average height of the feature will be used.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Pictorial Representation

Code: PIC

Definition: Specifies whether a pictorial representation of the object is available.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Pilot District

Code: PIL

Definition: Specifies the pilot district for which a pilot is responsible.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Pile Classification

Code: PLC

Definition: Tabulates types of piles.

Domain: Enumerated

PLC	0	Undefined
PLC	1	Stake
PLC	2	Snag
PLC	3	Post
PLC	4	Tripodal
PLC	997	Unpopulated
PLC	998	Not Applicable
PLC	999	Other

Name: Pipeline Type

Code: PLT

Definition: Identifies function of pipeline.

Domain: Enumerated

PLT	0	Undefined
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PLT	1	Transport
PLT	2	Outfall
PLT	3	Intake
PLT	4	Sewer
PLT	5	Valve
PLT	6	Pipeline in general
PLT	7	Bubbler System
PLT	8	Supply Pipe
PLT	997	Unpopulated
PLT	998	Not Applicable
PLT	999	Other

Name: Point of Interest

Code: POI

Definition: Place determined to be of interest or importance.

Domain: Enumerated

POI	0	Unknown
POI	1	Historic Battlefield
POI	997	Unpopulated
POI	998	Not Applicable
POI	999	Other

Name: Pond Partition Category

Code: POP

Definition: Classifies the kinds of ponds that the partitions separate.

Domain: Enumerated

POP	0	Unknown
POP	1	Fish Pond
POP	2	Reservoir
POP	3	Waste Pond
POP	997	Unpopulated
POP	998	Not Applicable
POP	999	Other

Name: Power Plant Category

Code: PPC

Definition: Energy source used to generate power.

Domain: Enumerated

PPC	0	Unknown
PPC	1	Hydro-electric
PPC	2	Nuclear
PPC	3	Solar
PPC	4	Thermal
PPC	5	Wind

PPC 6 Tidal
 PPC 7 Internal Combustion
 PPC 997 Unpopulated
 PPC 998 Not Applicable
 PPC 999 Other

Name: Populated Place Category

Code: PPL

Definition: The number of people within a feature (e.g., administrative and built-up areas).

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Persons	Long Integer	N/A	1 PERSON	N/A

Name: Populated Place Type

Code: PPT

Definition: The type of populated place.

Domain: Enumerated

PPT 0 Unknown
 PPT 1 Native Settlement
 PPT 2 Shanty Town
 PPT 3 Tent Dwellings
 PPT 99 Inland Village
 PPT 997 Unpopulated
 PPT 998 Not Applicable
 PPT 999 Other

Name: Periodic Restriction Beginning

Code: PR1

Definition: Beginning month for restrictions due to climate or other limitations.

Domain: Enumerated

PR1 0 Unknown
 PR1 1 Beginning seasonal limit - Jan.
 PR1 2 Beginning seasonal limit - Feb.
 PR1 3 Beginning seasonal limit - Mar.
 PR1 4 Beginning seasonal limit - Apr.
 PR1 5 Beginning seasonal limit - May
 PR1 6 Beginning seasonal limit - Jun.
 PR1 7 Beginning seasonal limit - Jul.
 PR1 8 Beginning seasonal limit - Aug.
 PR1 9 Beginning seasonal limit - Sep.
 PR1 10 Beginning seasonal limit - Oct.
 PR1 11 Beginning seasonal limit - Nov.
 PR1 12 Beginning seasonal limit - Dec.

PR1 997 Unpopulated
 PR1 998 Not Applicable
 PR1 999 Other

Name: Periodic Restriction Ending

Code: PR2

Definition: Ending month for restrictions due to climate or other limitations.

Domain: Enumerated

PR2 0 Unknown
 PR2 1 Ending seasonal limit - Jan.
 PR2 2 Ending seasonal limit - Feb.
 PR2 3 Ending seasonal limit - Mar.
 PR2 4 Ending seasonal limit - Apr.
 PR2 5 Ending seasonal limit - May
 PR2 6 Ending seasonal limit - Jun.
 PR2 7 Ending seasonal limit - Jul.
 PR2 8 Ending seasonal limit - Aug.
 PR2 9 Ending seasonal limit - Sep.
 PR2 10 Ending seasonal limit - Oct.
 PR2 11 Ending seasonal limit - Nov.
 PR2 12 Ending seasonal limit - Dec.
 PR2 997 Unpopulated
 PR2 998 Not Applicable
 PR2 999 Other

Name: Periodic Restriction Category

Code: PRC

Definition: Restriction due to climate or other limitations.

Domain: Enumerated

PRC 0 Unknown
 PRC 1 Perennially Open, Not Subject to Ice
 PRC 2 Subject to Ice
 PRC 3 Permanent Ice
 PRC 4 Seasonal limit - Jan.
 PRC 5 Seasonal limit - Feb.
 PRC 6 Seasonal limit - Mar.
 PRC 7 Seasonal limit - Apr.
 PRC 8 Seasonal limit - May
 PRC 9 Seasonal limit - Jun.
 PRC 10 Seasonal limit - Jul.
 PRC 11 Seasonal limit - Aug.
 PRC 12 Seasonal limit - Sep.
 PRC 13 Seasonal limit - Oct.
 PRC 14 Seasonal limit - Nov.

PRC 15 Seasonal limit - Dec.
PRC 16 Closed
PRC 997 Unpopulated
PRC 998 Not Applicable
PRC 999 Other

Code: PRM

Definition: Indicates whether an object is temporary or permanent. See EXS 11 and EXS 18.

Domain: Enumerated

PRM 0 Unknown
PRM 1 Permanent
PRM 2 Temporary
PRM 997 Unpopulated
PRM 998 Not Applicable
PRM 999 Other

Name: Product Category

Code: PRO

Definition: Principal material involved or product resulting from activity at site.

Domain: Enumerated

PRO 0 Unknown
PRO 1 Aircraft
PRO 2 Aluminum
PRO 3 Ammunition
PRO 4 Ash
PRO 5 Asphalt
PRO 6 Basalt
PRO 7 Bedrock
PRO 8 Boulders
PRO 9 Brick
PRO 10 Calcareous
PRO 11 Cement
PRO 12 Chalk
PRO 13 Chemical
PRO 14 Cinders
PRO 15 Cirripedia
PRO 16 Clay
PRO 17 Coal
PRO 18 Cobble
PRO 19 Coke
PRO 20 Composition
PRO 21 Concrete
PRO 22 Conglomerate

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PRO	23	Copper
PRO	24	Coral
PRO	25	Coral Head
PRO	26	Desalinated Water
PRO	27	Diamonds
PRO	28	Diatoms
PRO	29	Dolomite
PRO	30	Earthen
PRO	31	Electric
PRO	32	Eroded Lands
PRO	33	Explosives
PRO	34	Flysch
PRO	35	Food
PRO	36	Foraminifera
PRO	37	Fucus
PRO	38	Gas
PRO	39	Gasoline
PRO	40	Glass
PRO	41	Globigerina
PRO	42	Gold
PRO	43	Granite
PRO	44	VALUE INTENTIONALLY LEFT BLANK
PRO	45	Grass/Thatch
PRO	46	Gravel
PRO	47	Green Rocks
PRO	48	Ground
PRO	49	Ground (Shells)
PRO	50	Heat
PRO	51	Iron
PRO	52	Lava
PRO	53	VALUE INTENTIONALLY LEFT BLANK
PRO	54	Lead
PRO	55	Loess
PRO	56	Lumber
PRO	57	Macadam
PRO	58	Madrepores
PRO	59	Manganese
PRO	60	Marble
PRO	61	Marl
PRO	62	Masonry (Brick/Stone)
PRO	63	Mattes
PRO	64	Metal
PRO	65	Mud
PRO	66	Mussels
PRO	67	Oil

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Annex B-Attribute and Value Codes

PRO	68	Oil Blister
PRO	69	Ooze
PRO	70	Oysters
PRO	71	Paper
PRO	72	Part Metal
PRO	73	Pebbles
PRO	74	Plastic
PRO	75	Polyzoa
PRO	76	Porphyry
PRO	77	Prestressed Concrete
PRO	78	Pteropods
PRO	79	Pumice
PRO	80	Quartz
PRO	81	Radiolaria
PRO	82	Radioactive Material
PRO	83	Reinforced Concrete
PRO	84	Rock/Rocky
PRO	85	Rubber
PRO	86	Rubble
PRO	87	Salt
PRO	88	Sand
PRO	89	Sandstone
PRO	90	Schist
PRO	91	VALUE INTENTIONALLY LEFT BLANK
PRO	92	Scoria
PRO	93	Sea Tangle
PRO	94	Seaweed
PRO	95	Sewage
PRO	96	Shells
PRO	97	VALUE INTENTIONALLY LEFT BLANK
PRO	98	Shingle
PRO	99	Silt
PRO	100	Silver
PRO	101	Slag
PRO	102	Sludge
PRO	103	Snow/Ice
PRO	104	Soil
PRO	105	Spicules
PRO	106	Sponge
PRO	107	Steel
PRO	108	Stone
PRO	109	Sugar
PRO	110	Travertine
PRO	111	Tufa
PRO	112	Uranium

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Annex B-Attribute and Value Codes

PRO	113	Vegetation Products
PRO	114	Volcanic
PRO	115	Volcanic Ash
PRO	116	Water
PRO	117	Wood
PRO	118	Zinc
PRO	119	Bauxite
PRO	120	Bananas
PRO	121	Cotton
PRO	122	Bamboo
PRO	123	Coffee
PRO	124	Common fruit and/or nuts
PRO	125	Palms
PRO	126	Palmetto
PRO	127	Tailings
PRO	128	Refuse
PRO	129	Tobacco
PRO	130	None
PRO	131	Personnel
PRO	132	VALUE INTENTIONALLY LEFT BLANK(Not Applicable)
PRO	133	Telecommunications
PRO	134	Fish
PRO	135	Textile
PRO	137	Automobiles and Trucks
PRO	138	Crustaceans
PRO	139	Cultivated Shellfish
PRO	140	Ore
PRO	141	Drinking Water
PRO	142	Milk
PRO	143	Sawdust and, or Wood Chips
PRO	144	Scrap Metal
PRO	145	Liquefied Natural Gas (LNG)
PRO	146	Liquefied Petroleum Gas (LPG)
PRO	147	Wine
PRO	148	Grain
PRO	149	Mineral Oil
PRO	150	Waste
PRO	997	Not Applicable
PRO	998	Multiple
PRO	999	Other

Name: Physical Surface Characteristics

Code: PSC

Definition: Principal characteristic(s) of the surface.

Domain: Enumerated

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Annex B-Attribute and Value Codes

PSC	0	Unknown
PSC	1	Broken
PSC	2	Coarse
PSC	3	Decayed
PSC	4	Fine, minute particles
PSC	5	Gritty
PSC	6	Hard
PSC	7	Rotten
PSC	8	Soft
PSC	9	Sticky
PSC	10	Stiff
PSC	11	Streaky
PSC	12	Tenacious
PSC	13	Uneven
PSC	14	Bare/cleared
PSC	15	Karst
PSC	16	Membrane
PSC	17	Calcareous
PSC	18	Flinty
PSC	19	Glacial
PSC	20	Ground
PSC	21	Large
PSC	22	Rocky
PSC	23	Small
PSC	24	Speckled
PSC	25	Varied
PSC	26	Volcanic
PSC	27	Medium
PSC	28	Springs in Seabed
PSC	29	Mobile Bottom
PSC	99	VALUE INTENTIONALLY LEFT BLANK (Medium)
PSC	100	Unsurfaced
PSC	997	Unpopulated
PSC	998	Not Applicable
PSC	999	Other

Name: Physical State Category

Code: PST

Definition: Describes the physical state of the feature.

Domain: Enumerated

PST	0	Unknown
PST	1	Solid
PST	2	Liquid
PST	997	Unpopulated
PST	998	Not Applicable

PST 999 Other

Name: Pier/Wharf /Quay Classification

Code: PWC

Definition: Classification of decked berthing structure, based on configuration and structure.

Domain: Enumerated

PWC 0 Unknown
 PWC 1 Pier
 PWC 2 Wharf
 PWC 3 Quay
 PWC 997 Unpopulated
 PWC 998 Not Applicable
 PWC 999 Other

Name: Quality/Source Record Identifiers

Code: QID

Definition: The three character tag for the Source or Quality Record followed by the record number, (e.g. QAL4).

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	4 Characters

Name: Releasability

Code: QLE

Definition: Releasability statement with regard to the feature.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	4 Characters

Name: Quality of Position

Code: QUA

Definition: Stipulates the quality of the position.

Domain: Enumerated

QUA 0 Undefined
 QUA 1 Surveyed
 QUA 2 Unsurveyed
 QUA 3 Inadequately surveyed
 QUA 4 Approximated
 QUA 5 Doubtful
 QUA 6 Unreliable
 QUA 7 Reported (not surveyed)
 QUA 8 Reported (not confirmed)

QUA 9 Estimated
 QUA 10 Calculated
 QUA 997 Unpopulated
 QUA 998 Not Applicable
 QUA 999 Other

Name: Percentage Reliability of a Qualitative Attribute

Code: QUL

Definition: Percentage reliability of a Qualitative Attribute.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	0 to 100	1 %	N/A

Name: Standard Deviation of a Qualitative Attribute

Code: QUT

Definition: Standard deviation of a Qualitative Attribute.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Short Integer	0 to 4	1 Unit	N/A

Name: Radius of Sharp Curve

Code: RAD

Definition: Radius of curvature of sharp curves, expressed in meters.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Range of Effectiveness

Code: RAN

Definition: Radius of effectiveness of a navigational aid.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Nautical Miles	Short Integer	-32767 to 32767	1 NM	N/A

Name: Radar Station Classification

Code: RAS

Definition: Tabulates types of radar stations.

Domain: Enumerated

RAS 0 Undefined
 RAS 1 Radar surveillance station

RAS 2 Coast radar station
 RAS 997 Unpopulated
 RAS 998 Not Applicable
 RAS 999 Other

Name: Reliability of Bridge

Code: RBC

Definition: Reliability of bridge characteristics and military load classification based upon data source.

Domain: Enumerated

RBC 0 Unknown
 RBC 1 Known
 RBC 2 Estimated
 RBC 997 Unpopulated
 RBC 998 Not Applicable
 RBC 999 Other

Code: RCD

Definition: The date when the specific object or cartographic primitive was captured, edited, or deleted.
 Coded YYYYMMDD.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	8 Characters

Name: Road Type

Code: RDT

Definition: Classifies the various types of roads.

Domain: Enumerated

RDT 0 Unknown
 RDT 1 Street
 RDT 2 Rapid transit
 RDT 3 Laneway
 RDT 4 Service Lane
 RDT 997 Unpopulated
 RDT 998 Not Applicable
 RDT 999 Other

Name: Radar Reflector Attribute

Code: REF

Definition: Indicates whether or not a radar reflector is attached to, or connected with, a feature.

Domain: Enumerated

REF 0 Unknown
 REF 1 Radar Reflector Present

- REF 2 Radar Reflector Absent
- REF 997 Unpopulated
- REF 998 Not Applicable
- REF 999 Other

Name: Religious Denomination

Code: REL

Definition: Name of religious order at site.

Domain: Enumerated

- REL 0 Unknown
- REL 1 Buddhist
- REL 2 Moslem
- REL 3 Roman Catholic
- REL 4 Christian (undefined)
- REL 5 Judaism
- REL 6 Greek Orthodox
- REL 7 Protestant
- REL 8 Shinto
- REL 997 Unpopulated
- REL 998 Not Applicable
- REL 999 Other

Name: Reflection Type Category

Code: RET

Definition: The type of sonar reflection detected.

Domain: Enumerated

- RET 0 Unknown
- RET 1 Hyperbolic, from Bottom
- RET 2 Hyperbolic, from Sub-Bottom
- RET 997 Unpopulated
- RET 998 Not Applicable
- RET 999 Other

Name: Radar Transponder Beacon Frequency

Code: RFQ

Definition: Specifies the specific frequency of a radar transponder beacon.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Kilohertz	Short Integer	-32767 to 32767	1 KHZ	N/A

Name: Railroad Gauge Category

Code: RGC

Definition: The type of gauge used.

Domain: Enumerated

RGC	0	Unknown
RGC	1	Broad
RGC	2	Narrow
RGC	3	Normal (Country Specific)
RGC	4	Any
RGC	5	Standard (US) 4ft. 8.5 in.
RGC	997	Unpopulated
RGC	998	Not Applicable
RGC	999	Other

Name: Range Significance

Code: RGS

Definition: Indicates relative location of a beacon or light in a range.

Domain: Enumerated

RGS	0	Unknown
RGS	1	Front
RGS	2	Middle
RGS	3	Rear
RGS	4	Shared
RGS	997	Unpopulated
RGS	998	Not Applicable
RGS	999	Other

Name: Road Interchange Type

Code: RIT

Definition: The unique interchange design.

Domain: Enumerated

RIT	0	Unknown
RIT	1	Cloverleaf
RIT	2	Diamond
RIT	3	Fork
RIT	4	Rotary/Traffic Circle/Roundabout
RIT	5	Staggered Ramps
RIT	6	Standard Ramps
RIT	7	Symmetrical Ramps
RIT	8	Trumpet
RIT	9	Turban
RIT	10	Wye
RIT	997	Unpopulated

RIT 998 Not Applicable

RIT 999 Other

Name: Rock Strata Formation

Code: RKF

Definition: The structure of a rock formation.

Domain: Enumerated

RKF 0 Unknown

RKF 1 Columnar

RKF 2 Needle

RKF 3 Pinnacle

RKF 4 VALUE INTENTIONALLY LEFT BLANK

RKF 5 VALUE INTENTIONALLY LEFT BLANK

RKF 997 Unpopulated

RKF 998 Not Applicable

RKF 999 Other

Name: Railroad Maximum Axle Load

Code: RMA

Definition: Maximum load allowable on any single railroad vehicle axle.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Tons	Short Integer	-32767 to 32767	1 TON	N/A

Name: Railroad Maximum Load

Code: RMT

Definition: Maximum load allowable on a segment of a railroad or railroad feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Tons	Short Integer	-32767 to 32767	1 TON	N/A

Name: Secondary Route Number

Code: RN2

Definition: Alternative official route number (I-95,A-1,M-2 etc.) assigned to the feature.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Ranking of Feature

Code: RNK

Definition: Significance of feature, indicates likely range of facilities available at or in the close vicinity.

Domain: Enumerated

RNK	0	Unknown
RNK	1	Primary Rank
RNK	2	Secondary Rank
RNK	3	Tertiary Rank
RNK	997	Unpopulated
RNK	998	Not Applicable
RNK	999	Other

Name: Radio Station Classification

Code: ROS

Definition: Tabulates types of radio stations.

Domain: Enumerated

ROS	0	Undefined
ROS	1	Circular (non-directional) marine or aeromarine radio beacon
ROS	2	Directional radio beacon
ROS	3	Rotating pattern radio beacon
ROS	4	Consol beacon
ROS	5	Radio direction finding station
ROS	6	Coast radio station providing QTG service
ROS	7	Aeronautical radio beacon
ROS	997	Unpopulated
ROS	998	Not Applicable
ROS	999	Other

Name: Required Port Access

Code: RPA

Definition: An indicator that a water feature is used for access to a required port, or that the feature is in a water body used for access to a required port.

Domain: Enumerated

RPA	0	Unknown
RPA	1	Access Required
RPA	2	Access Not Required
RPA	997	Unpopulated
RPA	998	Not Applicable
RPA	999	Other

Name: Railroad Power Source

Code: RRA

Definition: Source of electrical power for railroad.

Domain: Enumerated

RRA	0	Unknown
RRA	1	Electrified Track
RRA	3	Overhead Electrified
RRA	4	Non-electrified
RRA	997	Unpopulated
RRA	998	Not Applicable
RRA	999	Other

Name: Railroad Categories

Code: RRC

Definition: The type of railroad system used to support various transportation uses.

Domain: Enumerated

RRC	0	Unknown
RRC	2	Car-Line
RRC	3	Monorail
RRC	6	Subway
RRC	8	Logging
RRC	10	Miniature
RRC	11	Rapid Transit Route - Rail
RRC	13	Marine Railroad
RRC	14	Tramway
RRC	15	Inclined Railway
RRC	16	Main Line
RRC	17	Branch Line
RRC	21	Railroad in Road
RRC	997	Unpopulated
RRC	998	Not Applicable
RRC	999	Other

Name: Rail Siding/Spur Attribute

Code: RSA

Definition: Type of connecting track.

Domain: Enumerated

RSA	0	Unknown
RSA	1	Spur
RSA	2	Siding
RSA	3	Passing
RSA	997	Unpopulated
RSA	998	Not Applicable

RSA 999 Other

Name: Rescue Station Classification

Code: RSC

Definition: Tabulates types of rescue station.

Domain: Enumerated

RSC	0	Undefined
RSC	1	Rescue station with life boat
RSC	2	Rescue station with rocket
RSC	3	Rescue station with life boat and rocket
RSC	4	Refuge for shipwrecked mariners
RSC	5	Refuge for intertidal area walkers
RSC	6	Lifeboat lying at a mooring
RSC	997	Unpopulated
RSC	998	Not Applicable
RSC	999	Other

Name: Road/Runway Surface Type

Code: RST

Definition: The physical surface composition of a road or runway.

Domain: Enumerated

RST	0	Unknown
RST	1	Hard/Paved
RST	2	Loose/Unpaved
RST	3	Loose/Light
RST	4	Corduroy
RST	5	Grass/Sod (Soft)
RST	6	Natural
RST	7	Permanent
RST	8	Temporary
RST	997	Unpopulated
RST	998	Not Applicable
RST	999	Other

Name: Railroad Track Arrangement

Code: RTA

Definition: The arrangement of trackage on a single railroad bed including both directions.

Domain: Enumerated

RTA	0	Unknown
RTA	1	Single
RTA	2	Double
RTA	3	Multiple
RTA	4	Juxtaposition
RTA	997	Unpopulated

RTA 998 Not Applicable
 RTA 999 Other

Name: Radar Transponder Beacon Classification

Code: RTB

Definition: Tabulates types of radar transponder beacon.

Domain: Enumerated

RTB 0 Undefined
 RTB 1 Ramark, radar beacon transmitting continuously
 RTB 2 Racon, radar transponder beacon with Morse identification
 RTB 3 Leading Racon and, or Radar Transponder Beacon
 RTB 997 Unpopulated
 RTB 998 Not Applicable
 RTB 999 Other

Name: Road Type Category

Code: RTC

Definition: NATO road type classification (see STANAG 3675).

Domain: Enumerated

RTC 0 Unknown
 RTC 1 NATO Category X
 RTC 2 NATO Category Y
 RTC 3 NATO Category Z
 RTC 997 Unpopulated
 RTC 998 Not Applicable
 RTC 999 Other

Name: Route Number

Code: RTN

Definition: Official route number (I-95, M-2, A-1, etc.) assigned to the feature.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	24 Characters

Name: Reservoir Type

Code: RTP

Definition: Indicates the method of containing the water in a reservoir.

Domain: Enumerated

RTP 0 Unknown
 RTP 1 Constructed Basin
 RTP 2 Back-up Water Impounded by a Dam
 RTP 997 Unpopulated
 RTP 998 Not Applicable

RTP 999 Other

Name: Route Intended Use

Code: RTT

Definition: Intended use of the route.

Domain: Enumerated

RTT 0	Unknown
RTT 1	Recommended Track
RTT 2	Recommended Track for Other Than Deep Draft Vessels
RTT 3	Recommended Track for Deep Draft Vessels
RTT 4	Deep Water Route
RTT 5	Transit Route
RTT 6	Radar Guided Track
RTT 7	Measured Distance Line
RTT 8	Safety Fairway/Channel
RTT 9	Traffic Lane (TSS)
RTT 10	Roundabout Lane (TSS)
RTT 11	Two-way Route
RTT 12	Recommended Track (TSS)
RTT 13	Recommended Direction of Traffic Flow
RTT 14	Primary Route
RTT 15	Secondary Route
RTT 16	Limited Access Route (e.g. Motorway/Autobahn/Interstate)
RTT 17	Q-Route
RTT 96	Recommended Traffic Lane Part
RTT 97	Centerline
RTT 98	Deep Water Route - Centerline
RTT 99	Deep Water Route - Part
RTT 997	Unpopulated
RTT 998	Not Applicable
RTT 999	Other

Name: Signal Station, Warning Classification

Code: SAW

Definition: Tabulates types of signal station, warning.

Domain: Enumerated

SAW 0	Undefined
SAW 1	Danger
SAW 2	Maritime obstruction
SAW 3	Cable
SAW 4	Military practice
SAW 5	Distress
SAW 6	Weather
SAW 7	Storm

SAW 8	Ice
SAW 9	Time
SAW 10	Tide
SAW 11	Tidal stream
SAW 12	Tide gauge
SAW 13	Tide scale
SAW 14	Diving
SAW 997	Unpopulated
SAW 998	Not Applicable
SAW 999	Other

Name: Shelter Belt Condition

Code: SBC

Definition: Indicates whether a linear stand of trees functions as a shelter belt, protecting roadways, railroads, cropland, construction, etc., from the effects of adverse weather.

Domain: Enumerated

SBC 0	Unknown
SBC 1	Functions as a shelter belt
SBC 2	Does not function as a shelter belt
SBC 997	Unpopulated
SBC 998	Not Applicable
SBC 999	Other

Name: Spring/Well Characteristic Category

Code: SCC

Definition: Type of available water.

Domain: Enumerated

SCC 0	Unknown
SCC 1	Alkaline
SCC 2	Not Applicable
SCC 3	VALUE INTENTIONALLY LEFT BLANK
SCC 4	Mineral
SCC 5	VALUE INTENTIONALLY LEFT BLANK
SCC 6	VALUE INTENTIONALLY LEFT BLANK
SCC 9	Freshwater/Potable
SCC 10	Salt
SCC 11	Fresh
SCC 997	Unpopulated
SCC 999	Other

Name: Stem Diameter Size Range (1)

Code: SD1

Definition: Estimated range (1) of the average stem diameter within area of feature, determined in centimeters at a distance of 1.4 meters above the ground.

Domain: Enumerated

SD1	0	Unknown
SD1	1	> 0 and <= 5.00
SD1	2	> 5.00 and <= 10.00
SD1	3	> 10.00 and <= 20.00
SD1	4	> 20.00 and <= 30.00
SD1	5	> 30.00 and <= 40.00
SD1	6	> 40.00 and <= 60.00
SD1	7	> 60.00
SD1	8	Not Applicable
SD1	997	Unpopulated
SD1	999	Other

Name: Stem Diameter Size Range (2)

Code: SD2

Definition: Estimated range (2) of the average stem diameter within area of feature, determined in centimeters at a distance of 1.4 meters above the ground.

Domain: Enumerated

SD2	0	Unknown
SD2	1	> 0 and <= 10.00
SD2	2	> 10.00 and <= 30.00
SD2	3	> 30.00 and <= 60.00
SD2	4	> 60.00 and <= 100.00
SD2	5	> 100.00
SD2	6	Not Applicable
SD2	997	Unpopulated
SD2	999	Other

Name: Soil Depth Category

Code: SDC

Definition: General depth of soil or surface material.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Code: SDE

Definition: Ranges of detailed depth (meters) of soil or unconsolidated material over bedrock.

Domain: Enumerated

SDE 0 Unknown
 SDE 1 <=0.25
 SDE 2 >0.25 and <=0.5
 SDE 3 >0.5 and <=1.5
 SDE 4 >1.5 and <=2.5
 SDE 5 >2.5 and <=5.0
 SDE 6 >5.0 and <=10.0
 SDE 7 >10.0
 SDE 997 Unpopulated
 SDE 998 Not Applicable
 SDE 999 Other

Name: Sand Dune Orientation

Code: SDO

Definition: Characteristic alignment of the dune as caused by the prevailing winds.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Code: SDR

Definition: The average diameter of trees in a stand, measured at a height of 1.4 m above the ground.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.01 M	N/A

Name: Stem Diameter Size

Code: SDS

Definition: The average diameter of trees in a stand, measured at a height of 1.4 m above the ground.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Sea Area Classification

Code: SEA

Definition: A property of large bodies of water characterized by tidal conditions, swells, or high heavy wave action. The condition can apply to both fresh and salt water.

Domain: Enumerated

SEA	0	Undefined
SEA	1	Sea area in general
SEA	2	Gat
SEA	3	Bank
SEA	4	Deep
SEA	5	Bay
SEA	6	Bench
SEA	7	Basin
SEA	8	Watt
SEA	9	Trench
SEA	10	Mud Flats
SEA	11	Reef
SEA	12	Ledge
SEA	13	Canyon
SEA	14	Narrows
SEA	15	Shoal
SEA	16	Knoll
SEA	17	Ridge
SEA	18	Seamount
SEA	19	Pinnacle
SEA	20	Abyssal Plain
SEA	21	Plateau
SEA	22	Spur
SEA	23	Shelf
SEA	24	Trough
SEA	25	Saddle
SEA	26	Abyssal Hills
SEA	27	Apron
SEA	28	Archipelagic Apron
SEA	29	Borderland
SEA	30	Continental Margin
SEA	31	Continental Rise
SEA	32	Escarpment
SEA	33	Fan
SEA	34	Fracture Zone
SEA	35	Gap
SEA	36	Guyot
SEA	37	Hill
SEA	38	Hole

- SEA 39 Levee
- SEA 40 Median Valley
- SEA 41 Moat
- SEA 42 Mountains
- SEA 43 Peak
- SEA 44 Province
- SEA 45 Rise
- SEA 46 Sea Channel
- SEA 47 Seamount Chain
- SEA 48 Shelf-edge
- SEA 49 Sill
- SEA 50 Slope
- SEA 51 Terrace
- SEA 52 Valley
- SEA 53 Canal
- SEA 54 Lake
- SEA 55 River
- SEA 997 Unpopulated
- SEA 998 Not Applicable
- SEA 999 Other

Name: Security Classification

Code: SEC

Definition: Defines the highest level of security associated with a feature.

Domain: Enumerated

- SEC 0 Unknown
- SEC 1 Top Secret
- SEC 2 Secret
- SEC 3 Confidential
- SEC 4 Restricted
- SEC 5 Unclassified
- SEC 997 Unpopulated
- SEC 998 Not Applicable
- SEC 999 Other

Name: Sequence of a Signal

Code: SEQ

Definition: Specifies the sequence of times occupied by intervals of light and eclipse.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Storage Facilities

Code: SFA

Definition: Storage facilities available at or in the near vicinity.

Domain: Enumerated

SFA	0	Unknown
SFA	1	Soft standing only
SFA	2	Hard standing only
SFA	3	Dutch Barn
SFA	4	Warehouse
SFA	5	Specialized warehouse
SFA	6	Grain storage
SFA	7	Ore storage
SFA	8	Liquid storage
SFA	9	Explosives
SFA	10	Ammunition
SFA	11	Gaseous storage
SFA	12	Salt
SFA	13	Gravel
SFA	14	Sand
SFA	15	Explosives
SFA	16	Food
SFA	17	Diesel Fuel
SFA	18	Gasoline
SFA	19	Oil
SFA	20	Water
SFA	995	None
SFA	997	Unpopulated
SFA	998	Not Applicable
SFA	999	Other

Name: Sea Floor Feature Category

Code: SFC

Definition: Type of object or area on the sea floor or below the water surface.

Domain: Enumerated

SFC	0	Unknown (Obstruction)
SFC	2	VALUE INTENTIONALLY LEFT BLANK (Other)
SFC	3	Fish Haven
SFC	4	Well
SFC	5	Submerged Production Platform
SFC	6	Wreckage
SFC	7	Shoaling
SFC	8	Less Water Reported
SFC	9	Unexploded Ordnance

SFC 10 Unspecified Non-submarine Contact
 SFC 11 Pinnacle
 SFC 997 Unpopulated
 SFC 998 Not Applicable
 SFC 999 Other

Name: Gradient/Slope

Code: SGC

Definition: Percentage of slope. (i.e. The change in height divided by the horizontal distance over which the change takes place, times one hundred $((h_2-h_1)/d)*100.$)

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	-32767 to 32767	1 %	N/A

Name: Slope Gradient Orientation

Code: SGO

Definition: The angular distance measured from true north (0 degrees) clockwise to the direction of maximum uphill slope of a feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Safe Horizontal Clearance

Code: SHC

Definition: Minimum safe horizontal distance between adjacent structures on either side of a navigable channel.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Shoreline Category

Code: SHO

Definition: Tabulates the topography and material types likely to be found on a shoreline.

Domain: Enumerated

SHO 0 Unknown
 SHO 1 Hillocks
 SHO 2 Flat
 SHO 3 Sandy
 SHO 4 Stony or shingly shore
 SHO 5 Artificial
 SHO 6 Steep

SHO 7 Glacier
SHO 8 Ice Coast
SHO 9 Steep Coast
SHO 997 Unpopulated
SHO 998 Not Applicable
SHO 999 Other

Name: Shape of Beacon

Code: SHP

Definition: Describes the characteristic geometric form of the beacon.

Domain: Enumerated

SHP 0 Undefined
SHP 1 Stake/Pole
SHP 2 Withy
SHP 3 Beacon Tower
SHP 4 Lattice Beacon
SHP 5 Pile Beacon
SHP 6 Cairn
SHP 7 Buoyant Beacon
SHP 8 Daymark Board - Square
SHP 9 Daymark Board - Triangle
SHP 10 Daymark Board - Rectangle
SHP 11 Articulated Beacon
SHP 997 Unpopulated
SHP 998 Not Applicable
SHP 999 Other

Name: Snow/Ice Category

Code: SIC

Definition: Indicates the composition of the feature.

Domain: Enumerated

SIC 0 Unknown
SIC 1 Snow
SIC 2 Ice
SIC 997 Unpopulated
SIC 998 Not Applicable
SIC 999 Other

Name: Signal Station, Traffic Classification

Code: SIT

Definition: Tabulates types of signal station, traffic.

Domain: Enumerated

SIT 0 Undefined
SIT 1 Port control

SIT	2	Port entry and departure
SIT	3	International port traffic
SIT	4	Berthing
SIT	5	Dock
SIT	6	Lock
SIT	7	Flood barrage
SIT	8	Bridge passage
SIT	9	Dredging
SIT	997	Unpopulated
SIT	998	Not Applicable
SIT	999	Other

Name: Slope Gradient Left (1)

Code: SL1

Definition: Predominant slope range (1) on the left bank (facing downstream) in percent, measured from mean water level to the first accessible break in slope above the mean water level.

Domain: Enumerated

SL1	0	Unknown
SL1	1	<= 30
SL1	2	> 30 and <= 45
SL1	3	> 45 and <= 60
SL1	4	> 60
SL1	5	Not Applicable
SL1	997	Unpopulated
SL1	999	Other

Name: Slope Gradient Left (2)

Code: SL2

Definition: Predominant slope range (2) of the left bank (facing downstream) in percent, measured from mean water level to the first accessible break in slope above the mean water level.

Domain: Enumerated

SL2	0	Unknown
SL2	1	<= 60
SL2	2	> 60
SL2	3	Not Applicable
SL2	997	Unpopulated
SL2	999	Other

Name: Shipping Load Class

Code: SLC

Definition: A description of any load restrictions which apply to ships using a section of waterway or facility.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	80 Characters

Name: Shoreline Type Category

Code: SLT

Definition: The physical characteristic of the shoreline area.

Domain: Enumerated

SLT	0	Unknown
SLT	6	Mangrove/Nipa
SLT	8	Marsh, Swamp
SLT	10	Rocky
SLT	11	Rubble
SLT	13	Sandy
SLT	14	Stony, Shingly
SLT	15	VALUE INTENTIONALLY LEFT BLANK (Other)
SLT	16	Coral
SLT	17	Ice
SLT	997	Unpopulated
SLT	998	Not Applicable
SLT	999	Other

Name: Surficial Material Depth Category

Code: SM1

Definition: Estimates general depth of soil or unconsolidated surface materials, expressed in 0.5 meter increments.

Domain: Enumerated

SM1	0	Unknown
SM1	1	< 0.5 (Meters)
SM1	2	>= 0.5 (Meters)
SM1	997	Unpopulated
SM1	998	Not Applicable
SM1	999	Other

Name: Surface Material Category

Code: SMC

Definition: Surface material composition excluding internal structural material.

Domain: Enumerated

SMC	0	Unknown
SMC	1	Aircraft
SMC	2	Aluminum
SMC	3	Ammunition
SMC	4	Ash
SMC	5	Asphalt

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SMC	6	Basalt
SMC	7	Bedrock
SMC	8	Boulders
SMC	9	Brick
SMC	10	Calcareous
SMC	11	Cement
SMC	12	Chalk
SMC	13	Chemical
SMC	14	Cinders
SMC	15	Cirripedia
SMC	16	Clay
SMC	17	Coal
SMC	18	Cobble
SMC	19	Coke
SMC	20	Composition
SMC	21	Concrete
SMC	22	Conglomerate
SMC	23	Copper
SMC	24	Coral
SMC	25	Coral Head
SMC	26	Desalinated Water
SMC	27	Diamonds
SMC	28	Diatoms
SMC	29	Dolomite
SMC	30	Earthen
SMC	31	Electric
SMC	32	Eroded Lands
SMC	33	Explosives
SMC	34	Flysch
SMC	35	Food
SMC	36	Foraminifera
SMC	37	Fucus
SMC	38	Gas
SMC	39	Gasoline
SMC	40	Glass
SMC	41	Globigerina
SMC	42	Gold
SMC	43	Granite
SMC	44	VALUE INTENTIONALLY LEFT BLANK
SMC	45	Grass/Thatch
SMC	46	Gravel
SMC	47	Green Rocks
SMC	48	Ground
SMC	49	Ground (Shells)
SMC	50	Heat

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SMC	51	Iron
SMC	52	Lava
SMC	53	VALUE INTENTIONALLY LEFT BLANK
SMC	54	Lead
SMC	55	Loess
SMC	56	Lumber
SMC	57	Macadam
SMC	58	Madrepores
SMC	59	Manganese
SMC	60	Marble
SMC	61	Marl
SMC	62	Masonry (Brick/Stone)
SMC	63	Mattes
SMC	64	Metal
SMC	65	Mud
SMC	66	Mussels
SMC	67	Oil
SMC	68	Oil Blister
SMC	69	Ooze
SMC	70	Oysters
SMC	71	Paper
SMC	72	Part Metal
SMC	73	Pebbles
SMC	74	Plastic
SMC	75	Polyzoa
SMC	76	Porphyry
SMC	77	Prestressed Concrete
SMC	78	Pteropods
SMC	79	Pumice
SMC	80	Quartz
SMC	81	Radiolaria
SMC	82	Radioactive Material
SMC	83	Reinforced Concrete
SMC	84	Rock/Rocky
SMC	85	Rubber
SMC	86	Rubble
SMC	87	Salt
SMC	88	Sand
SMC	89	Sandstone
SMC	90	Schist
SMC	91	Spoils/Tailings
SMC	92	Scoria
SMC	93	Sea Tangle
SMC	94	Seaweed
SMC	95	Sewage

SMC 96	Shells
SMC 97	VALUE INTENTIONALLY LEFT BLANK
SMC 98	Shingle
SMC 99	Silt
SMC 100	Silver
SMC 101	Slag
SMC 102	Sludge
SMC 103	Snow/Ice
SMC 104	Soil
SMC 105	Spicules
SMC 106	Sponge
SMC 107	Steel
SMC 108	Stone
SMC 109	Sugar
SMC 110	Travertine
SMC 111	Tufa
SMC 112	Uranium
SMC 113	Vegetation Products
SMC 114	Volcanic
SMC 115	Volcanic Ash
SMC 116	Water
SMC 117	Wood
SMC 118	Zinc
SMC 119	Distorted Surface
SMC 120	Sand and Gravel
SMC 121	Rip-Rap
SMC 122	Evaporites
SMC 124	Sand and Boulders
SMC 126	Sand and Mud
SMC 127	Karst
SMC 198	Kelp
SMC 199	Sandwaves
SMC 200	Herbaceous/Scrub Vegetation (Excluding trees)
SMC 201	Trees
SMC 202	Wetland Vegetation
SMC 203	Herbaceous Vegetation
SMC 204	Treed Vegetation
SMC 205	Paint
SMC 250	Composite - 50 % or more of the runway length is permanent
SMC 251	PEM - part concrete, part asphalt or part bitumen bound macadam
SMC 252	Permanent - hard surface type unknown
SMC 253	Bituminous - tar or asphalt mixed in place, oiled
SMC 254	Composite Soft - less than 50% of the runway length is permanent
SMC 255	Graded or rolled earth, grass on graded earth
SMC 256	Grass or earth not graded or rolled

SMC	257	Ice
SMC	258	Snow
SMC	259	Macadam - crushed rock water bound
SMC	260	Membrane - plastic or other coated fiber material
SMC	261	Mix - mix in place using non-bituminous binder such as portland cement
SMC	262	Laterite
SMC	263	Sand - sand graded, rolled or oiled
SMC	997	Unpopulated
SMC	998	Not Applicable
SMC	999	Other

Name: Sounding Category

Code: SND

Definition: Condition of depth.

Domain: Enumerated

SND	0	Unknown
SND	1	Drying Heights
SND	2	No Bottom Found
SND	3	VALUE INTENTIONALLY LEFT BLANK
SND	4	VALUE INTENTIONALLY LEFT BLANK
SND	6	VALUE INTENTIONALLY LEFT BLANK
SND	7	VALUE INTENTIONALLY LEFT BLANK
SND	8	Out of position
SND	9	Slant
SND	10	Ordinary
SND	11	Not Regularly Maintained
SND	90	Adequately sounded
SND	91	No bottom found at depth shown
SND	92	Depth unknown
SND	93	Doubtful Sounding
SND	94	Unreliable sounding
SND	95	Least depth known
SND	96	Least depth unknown, safe clearance at value shown
SND	97	Value reported (not surveyed)
SND	98	Value reported (not confirmed)
SND	99	Maintained depth
SND	997	Unpopulated
SND	998	Not Applicable
SND	999	Other

Name: Severity of Hazard

Code: SOH

Definition: Severity of hazard.

Domain: Enumerated

- SOH 0 Unknown
- SOH 1 Dangerous
- SOH 2 Non-Dangerous
- SOH 3 Obstruction
- SOH 99 Non-Dangerous to surface navigation but, avoid anchoring/trawling
- SOH 997 Unpopulated
- SOH 998 Not Applicable
- SOH 999 Other

Name: Exposition of Sounding

Code: SOU

Definition: Indicated whether the value of a sounding is shallower than, deeper than, or within the range depth of the surrounding depth area.

Domain: Enumerated

- SOU 0 Undefined
- SOU 1 Within the range of depth of the surrounding depth area
- SOU 2 Shallower than the range of depth of the surrounding depth area
- SOU 3 Deeper than the range of depth of the surrounding depth area
- SOU 997 Unpopulated
- SOU 998 Not Applicable
- SOU 999 Other

Name: Speed Limit (MPH)

Code: SPD

Definition: The maximum speed legally permitted on a given stretch of road.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Miles Per Hour	Short Integer	0 to 32767	1 MPH	N/A

Name: Spot Elevation Category

Code: SPE

Definition: Qualifies the spot elevation.

Domain: Enumerated

- SPE 0 Unknown
- SPE 1 Top of trees
- SPE 2 Out of position
- SPE 3 Summit
- SPE 997 Unpopulated
- SPE 998 Not Applicable
- SPE 999 Other

Name: Span Length Longest

Code: SPL

Definition: Length of longest span of a bridge.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Speed Limit (KPH)

Code: SPM

Definition: Speed Limit in kilometers per hour.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Kilometers Per Hou:	Short Integer	0 to 32767	1 KPH	N/A

Name: Slope Polygon Range

Code: SPR

Definition: Range indicating the slope of ground within delineated area of feature, reported in percent.

Domain: Enumerated

SPR	0	Unknown
SPR	1	<= 3
SPR	2	> 3 and <= 10
SPR	3	> 10 and <= 15
SPR	4	> 15 and <= 20
SPR	5	> 20 and <= 30
SPR	6	> 30 and <= 45
SPR	7	> 45 and <= 60
SPR	8	> 60 and <= 85
SPR	9	> 85
SPR	10	Culturally or Naturally Dissected Land (0 to >85)
SPR	997	Unpopulated
SPR	998	Not Applicable
SPR	999	Other

Name: Slope Gradient Right (1)

Code: SR1

Definition: Predominant slope range (1) of the right bank (facing downstream) in percent, measured from mean water level to the first break in slope above the mean water level.

Domain: Enumerated

SR1	0	Unknown
SR1	1	<= 30
SR1	2	> 30 and <= 45

SR1 3 > 45 and <= 60
 SR1 4 > 60
 SR1 5 Not Applicable
 SR1 997 Unpopulated
 SR1 999 Other

Name: Slope Gradient Right (2)

Code: SR2

Definition: Predominant slope range (2) of the right bank (facing downstream) in percent, measured from mean water level to the first break in slope above the mean water level.

Domain: Enumerated

SR2 0 Unknown
 SR2 1 <= 60
 SR2 2 > 60
 SR2 3 Not Applicable
 SR2 997 Unpopulated
 SR2 999 Other

Name: Surface Roughness Description

Code: SRD

Definition: Describes the condition of the surface materials that may be used for mobility prediction, construction material, and landing sites.

Domain: Enumerated

SRD 0 Unknown
 SRD 1 No surface roughness effect
 SRD 2 Area of high landslide potential
 SRD 3 Uncohesive surface material/flat
 SRD 4 Rough
 SRD 5 Angular
 SRD 6 Rounded
 SRD 11 Surface of numerous cobbles and boulders
 SRD 12 Areas of stony terrain
 SRD 13 Stony soil with surface rock
 SRD 14 Stony soil with scattered boulders
 SRD 15 Stony soil with numerous boulders
 SRD 16 Numerous boulders
 SRD 17 Numerous rock outcrops
 SRD 18 Area of scattered boulders
 SRD 19 Talus slope
 SRD 20 Boulder Field
 SRD 31 Highly fractured rock surface
 SRD 32 Weathered lava flows
 SRD 33 Unweathered lava flows
 SRD 34 Stony soil with numerous rock outcrops
 SRD 35 Irregular surface with deep fractures of foliation

SRD	36	Rugged terrain with numerous rock outcrops
SRD	37	Rugged bedrock surface
SRD	38	Sand dunes
SRD	39	Sand dunes/low
SRD	40	Sand dunes/high
SRD	41	Active sand dunes
SRD	42	Stabilized sand dunes
SRD	43	Highly distorted area, sharp rocky ridges
SRD	51	Stony soil cut by numerous gullies
SRD	52	Moderately dissected terrain
SRD	53	Moderately dissected terrain with scattered rock outcrops
SRD	54	Dissected floodplain
SRD	55	Highly dissected terrain
SRD	56	Area with deep erosional gullies
SRD	57	Steep, rugged, dissected terrain with narrow gullies
SRD	58	Karst areas of numerous sinkholes and solution valleys
SRD	59	Karst area of numerous sinkholes
SRD	60	Karst/hummocky terrain covered with large conical hills
SRD	61	Karst/hummocky terrain covered with low, broad-based mounds
SRD	62	Arroyo/wadi/wash
SRD	63	Playa/dry lake
SRD	64	Area of numerous meander scars and/or oxbow lakes
SRD	65	Solifluction lobes and frost scars
SRD	66	Hummocky ground, areas of frost heaving
SRD	67	Area of frost polygons
SRD	68	Area containing sabkhas
SRD	69	Area of numerous small lakes and ponds
SRD	70	Area of numerous crevasses
SRD	81	Area of numerous terraces
SRD	82	Quarries
SRD	83	Strip mines
SRD	84	Quarry/gravel pit
SRD	85	Quarry/sand pit
SRD	86	Mine tailings/waste piles
SRD	87	Salt evaporators
SRD	88	Area of numerous dikes
SRD	89	Area of numerous diked fields
SRD	90	Area of numerous fences
SRD	91	Area of numerous stone walls
SRD	92	Area of numerous man-made canals/drains/ditches
SRD	93	Area of numerous terraced fields
SRD	94	Parallel earthen mounds (row crops)
SRD	95	Area of numerous hedgerows
SRD	997	Unpopulated
SRD	998	Not Applicable

SRD 999 Other

Name: Surface Roughness Qualifier

Code: SRQ

Definition: A code which relates a surface material mapping unit to a Surface Roughness Description (SRD) value.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Qualifiers	Short Integer	-32767 to 32767	1 Qualifier	N/A

Name: Structure Shape Category

Code: SSC

Definition: Geometric form, appearance, or configuration of the feature.

Domain: Enumerated

SSC 0	Unknown
SSC 1	Barrel, Ton
SSC 2	Blimp
SSC 3	Boat Hull (Float)
SSC 4	Bullet
SSC 5	VALUE INTENTIONALLY LEFT BLANK
SSC 6	Conical/Peaked/NUN
SSC 7	Cylindrical (Upright)/CAN
SSC 9	VALUE INTENTIONALLY LEFT BLANK
SSC 10	Pillar/Spindle
SSC 11	VALUE INTENTIONALLY LEFT BLANK
SSC 12	Pyramid
SSC 13	VALUE INTENTIONALLY LEFT BLANK
SSC 14	VALUE INTENTIONALLY LEFT BLANK
SSC 15	Solid/filled
SSC 16	Spar
SSC 17	Spherical (Hemispherical)
SSC 18	Truss
SSC 19	With Radome
SSC 20	VALUE INTENTIONALLY LEFT BLANK
SSC 21	Artificial Mountain
SSC 22	Crescent
SSC 23	Ferris Wheel
SSC 24	Enclosed
SSC 25	Roller Coaster
SSC 26	Lateral
SSC 27	Mounds
SSC 28	Ripple
SSC 29	Star
SSC 30	Transverse

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SSC	31	VALUE INTENTIONALLY LEFT BLANK
SSC	33	VALUE INTENTIONALLY LEFT BLANK
SSC	34	VALUE INTENTIONALLY LEFT BLANK
SSC	35	VALUE INTENTIONALLY LEFT BLANK
SSC	36	Windmotor
SSC	38	VALUE INTENTIONALLY LEFT BLANK
SSC	40	VALUE INTENTIONALLY LEFT BLANK
SSC	46	Open
SSC	52	'A' Frame
SSC	53	'H' Frame
SSC	54	'T' Frame
SSC	56	'Y' Frame
SSC	57	VALUE INTENTIONALLY LEFT BLANK
SSC	58	VALUE INTENTIONALLY LEFT BLANK
SSC	59	Telescoping Gasholder (Gasometer)
SSC	60	Mast
SSC	61	Tripod
SSC	62	VALUE INTENTIONALLY LEFT BLANK
SSC	63	VALUE INTENTIONALLY LEFT BLANK
SSC	65	Cylindrical with flat top
SSC	66	Cylindrical with domed top
SSC	71	Cylindrical/Peaked
SSC	73	Superbuoy
SSC	74	'T' Frame
SSC	75	Tetrahedron
SSC	76	Funnel
SSC	77	Arch
SSC	78	Multi-Arch
SSC	79	Round
SSC	80	Rectangular
SSC	81	Dragons Teeth
SSC	82	I-Beam
SSC	83	Square
SSC	84	Irregular
SSC	85	Diamond Shaped Buoy
SSC	86	Oval
SSC	87	Dome
SSC	88	Spherical with Column Support
SSC	89	Cylindrical or Peaked with tower support
SSC	90	High-Rise Building
SSC	91	Cylindrical
SSC	92	Cubic
SSC	93	Pole
SSC	94	Board
SSC	95	Column (Pillar)

SSC	96	Plaque
SSC	97	Statue
SSC	98	Cross
SSC	107	Tower
SSC	108	Scanner
SSC	109	Obelisk
SSC	110	Radome, Tower Mounted
SSC	997	Unpopulated
SSC	998	Not Applicable
SSC	999	Other

Name: Structure Shape of Roof

Code: SSR

Definition: Roof shape.

Domain: Enumerated

SSR	0	Unknown
SSR	6	Conical/Peaked/NUN
SSR	38	Curved/Round (Quonset)
SSR	40	Dome
SSR	41	Flat
SSR	42	Gable (Pitched)
SSR	43	VALUE INTENTIONALLY LEFT BLANK
SSR	44	VALUE INTENTIONALLY LEFT BLANK
SSR	45	VALUE INTENTIONALLY LEFT BLANK
SSR	46	VALUE INTENTIONALLY LEFT BLANK
SSR	47	Sawtooth
SSR	48	VALUE INTENTIONALLY LEFT BLANK
SSR	49	VALUE INTENTIONALLY LEFT BLANK
SSR	50	With Monitor
SSR	51	With Steeple
SSR	55	Flat with Monitor
SSR	58	VALUE INTENTIONALLY LEFT BLANK
SSR	64	Gable with Monitor
SSR	65	VALUE INTENTIONALLY LEFT BLANK
SSR	66	VALUE INTENTIONALLY LEFT BLANK
SSR	71	VALUE INTENTIONALLY LEFT BLANK
SSR	72	VALUE INTENTIONALLY LEFT BLANK
SSR	77	With Cupola
SSR	78	With Turret
SSR	79	With Tower
SSR	80	With Minaret
SSR	997	Unpopulated
SSR	998	Not Applicable
SSR	999	Other

Name: Sound Signal Type

Code: SST

Definition: Type of audible signal.

Domain: Enumerated

SST	0	Unknown
SST	1	Bell
SST	2	Diaphone
SST	3	Explosive Fog Signal
SST	4	Gong
SST	5	Gun
SST	6	Horn
SST	7	Nautophone
SST	8	Radio Fog Signal
SST	9	Siren
SST	10	Submarine Fog Bell
SST	11	Submarine Oscillator
SST	12	Submarine Sound Signal (Connected to Shore)
SST	13	Submarine Sound Signal (Not Connected to Shore)
SST	14	Whistle
SST	15	Reed
SST	16	None
SST	98	Tyfon
SST	997	Unpopulated
SST	998	Not Applicable
SST	999	Other

Name: Station Type Category (Maritime)

Code: STA

Definition: Equipment or activity at site.

Domain: Enumerated

STA	0	Unknown
STA	1	Coast Guard
STA	2	Fireboat
STA	3	Marine Police
STA	4	Ice Signal
STA	5	Lifeboat/Rescue
STA	6	Port Control
STA	7	VALUE INTENTIONALLY LEFT BLANK
STA	8	VALUE INTENTIONALLY LEFT BLANK
STA	9	VALUE INTENTIONALLY LEFT BLANK
STA	10	VALUE INTENTIONALLY LEFT BLANK
STA	11	Pilot
STA	12	VALUE INTENTIONALLY LEFT BLANK

STA 13	Signal
STA 14	Signal Mast
STA 15	Storm Signal
STA 16	Stream Signal
STA 17	Tide Signal
STA 18	Time Ball
STA 19	Time Signal
STA 20	Unmanned Oceanographic
STA 21	Weather Signal
STA 22	Fog Signal
STA 23	VALUE INTENTIONALLY LEFT BLANK
STA 25	Semaphore
STA 26	STA
STA 27	Tidal Current Signal
STA 28	Traffic Signal
STA 29	Bridge Signal
STA 30	Lock Signal
STA 31	VALUE INTENTIONALLY LEFT BLANK
STA 32	International Port Signals
STA 33	Firing Practice Signal Station
STA 34	Signal Station, Traffic
STA 35	Warning
STA 36	Radar Surveillance Station
STA 37	Pilot Lookout Station
STA 38	Theodolite Station
STA 39	Camera Station
STA 40	RADAR Target
STA 41	SONAR Target
STA 42	UQC/WQC Station
STA 43	UEWS
STA 44	BOMIS
STA 45	Transit Hut
STA 46	FORACS Transducer 77 (FT77)
STA 47	NMH
STA 997	Unpopulated
STA 998	Not Applicable
STA 999	Other

Name: Source Type Code

Code: STC

Definition: The source from which features are captured or upgraded.

Domain: Enumerated

STC 0	Unknown
STC 1	Survey Source
STC 2	Stereo Imagery Exploitation

STC 3 Mono Imagery Exploitation
 STC 4 Cartographic Source
 STC 5 Reported Information
 STC 997 Unpopulated
 STC 998 Not Applicable
 STC 999 Other

Name: Soil Trafficability Group (Derived from STP)

Code: STG

Definition: Soils described by the Unified Soil Classification System categorized by their wet weather trafficability characteristics.

Domain: Enumerated

STG 0 Unknown
 STG 1 A [GW,GP,SW,SP]
 STG 2 B [CH]
 STG 3 C [GC,SC,CL]
 STG 4 D [GM,SM,ML,ML-CL,MH,OL,OH]
 STG 5 E [PT]
 STG 6 X [Not Evaluated]
 STG 997 Unpopulated
 STG 998 Not Applicable
 STG 999 Other

Name: Seasonal Tent Location

Code: STL

Definition: The seasonal habitat location of nomadic people.

Domain: Enumerated

STL 0 Unknown
 STL 1 Winter Location
 STL 2 Summer Location
 STL 997 Unpopulated
 STL 998 Not Applicable
 STL 999 Other

Name: Soil Types

Code: STP

Definition: Soils described by the Unified Soil Classification System (USCS)

Domain: Enumerated

STP 0 Unknown
 STP 1 GW Well graded gravels or gravel-sand mixtures, little or no fines
 STP 2 GP Poorly graded gravels or gravel-sand mixtures, little or no fines
 STP 3 GM Silty gravels, gravel-sand-silt mixtures
 STP 4 GC Clayey gravels, gravel-sand-clay mixtures
 STP 5 SW Well graded sand or gravelly sands, little or no fines

STP	6	SP Poorly graded sands or gravelly sands, little or no fines
STP	7	SM Silty sands, sand-silt mixture
STP	8	SC Clayey sands, sand-clay mixtures
STP	9	ML Inorganic silts and very fine sands, rock floor, silty or clayey fine sands or clayey with slight plasticity
STP	10	CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
STP	11	OL Organic silts and organic silty clays
STP	12	CH Inorganic clays of high plasticity, fat clays
STP	13	MH Inorganic silts, micaceous or diatomaceous
STP	14	OH Organic clays of medium to high plasticity, organic silts
STP	15	PT Peat and other highly organic soils
STP	17	ML-CL Soil type having both ML and CL characteristics
STP	18	Evaporites
STP	99	Not Evaluated
STP	501	CCM-1 (used for DA010)
STP	502	CCM-2 (used for DA010)
STP	503	CCM-3 (used for DA010)
STP	504	CCM-4 (used for DA010)
STP	505	CCM-5 (used for DA010)
STP	506	CCM-6 (used for DA010)
STP	997	Unpopulated
STP	998	Not Applicable
STP	999	Other

Code: STQ

Definition: Coded value indicating percent of summer canopy closure within delineated area of feature.

Domain: Enumerated

STQ	0	Unknown
STQ	1	<=25
STQ	2	>25 and <=50
STQ	3	>50 and <=75
STQ	4	>75
STQ	5	Not Applicable
STQ	997	Unpopulated
STQ	998	Not Applicable
STQ	999	Other

Name: Summer Tree Cover Density Coded

Code: STR

Definition: Value indicating percent of summer canopy closure within delineated area of feature. (See also STQ for coded attribute.)

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Percent	Short Integer	0 to 100	1 %	N/A

Name: Special Use Airspace Altitude Limits

Code: SUA

Definition: Description of the altitude limits of Special Use Airspaces.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	256 Characters

Code: SUE

Definition: The end date of the survey. Coded YYYYMMDD.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	8 Characters

Name: Supervision of Light

Code: SUP

Definition: Stipulates whether the light is equipped with a standby or emergency equipment.

Domain: Enumerated

SUP	0	Undefined
SUP	1	Watched light
SUP	2	Unwatched light
SUP	997	Unpopulated
SUP	998	Not Applicable
SUP	999	Other

Name: Survey Category

Code: SUR

Definition: Tabulates the various qualifiers of the survey carried out for a feature.

Domain: Enumerated

SUR	0	Unknown (see QUA)
SUR	1	Surveyed
SUR	2	Inadequately Surveyed
SUR	997	Unpopulated
SUR	998	Not Applicable
SUR	999	Other

Code: SUS

Definition: The start date of the survey. Coded YYYYMMDD.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Structured Text	ASCII Text	N/A	N/A	8 Characters

Name: Sounding Velocity

Code: SVC

Definition: Indicates type of correction that has been added to, or subtracted from instrument reading to obtain correct depth.

Domain: Enumerated

SVC	0	Unknown
SVC	1	Echo Sounder Calibrated at 4800 ft/sec Uncorrected
SVC	2	Echo Sounder Calibrated at 1500 m/sec Uncorrected
SVC	3	Mathews Tables (NP 139) Corrected
SVC	4	Sound Velocity Meter (SVM) Corrected
SVC	5	Corrected by other means of calibration
SVC	997	Unpopulated
SVC	998	Not Applicable
SVC	999	Other

Name: Soil Wetness Condition

Code: SWC

Definition: General moisture content or condition of a soil.

Domain: Enumerated

SWC	0	Unknown
SWC	1	Dry
SWC	2	Moist
SWC	3	Wet
SWC	4	Frozen/Permafrost
SWC	997	Unpopulated
SWC	998	Not Applicable
SWC	999	Other

Name: Single Wheel Bearing Load

Code: SWL

Definition: The estimated single wheel load (ESWL).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Kips	Short Integer	-32767 to 32767	1 KIP	N/A

Name: Spring Feature Type

Code: SWT

Definition: Identifies the type of spring or water-hole.

Domain: Enumerated

SWT	0	Unknown
SWT	1	Geyser
SWT	2	Hot Spring
SWT	3	Fumarole
SWT	4	Artesian
SWT	5	Water-hole
SWT	6	Walled-In Spring
SWT	997	Unpopulated
SWT	998	Not Applicable
SWT	999	Other

Name: Tree Canopy Levels

Code: TCL

Definition: The number of canopies (vegetation levels) in a woodland.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Levels	Short Integer	-32767 to 32767	1 LEVEL	N/A

Name: Technique of Sounding Measurement

Code: TEC

Definition: Encodes the various techniques and methods of sounding measurement.

Domain: Enumerated

TEC	0	Undefined
TEC	1	Found by echo sounder
TEC	2	Found by side scan sonar
TEC	3	Found by multi-beam
TEC	4	Found by diver
TEC	5	Found by lead-line
TEC	6	Found by wire-drag
TEC	7	Found by Laser
TEC	8	Swept by Vertical Acoustic System
TEC	9	Found by Electromagnetic Sensor
TEC	10	Photogrammetry
TEC	11	Satellite Imagery
TEC	12	Found by Leveling
TEC	13	Computer Generated
TEC	997	Unpopulated
TEC	998	Not Applicable

TEC 999 Other

Name: Telescope Category

Code: TEL

Definition: Classifies the types of telescopes.

Domain: Enumerated

TEL	0	Unknown
TEL	1	Optical
TEL	2	Parabolic Radio Antenna
TEL	3	Radio Ground Array
TEL	997	Unpopulated
TEL	998	Not Applicable
TEL	999	Other

Name: Tidal/Non-Tidal Category

Code: TID

Definition: Identifies whether a feature is affected by tidal water.

Domain: Enumerated

TID	0	Unknown
TID	1	Non-Tidal
TID	2	Tidal/Tidal Fluctuating
TID	997	Unpopulated
TID	998	Not Applicable
TID	999	Other

Name: Time Attribute

Code: TIM

Definition: The time, expressed in hours of duration, for which an activity is permitted.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Hours	Short Integer	0 to 24	1 H	N/A

Name: Total Length

Code: TLN

Definition: The total length of the traveled way between two locations.

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Long Integer	N/A	1 M	N/A

Name: Top Mark Characteristic

Code: TMC

Definition: The characteristic shape secured at the top of a buoy or beacon to aid identification.

Domain: Enumerated

- TMC 0 Unknown
- TMC 1 East Mark (2 cones - base together)
- TMC 2 Isolated Danger (2 balls)
- TMC 3 North Mark (2 cones - pointing up)
- TMC 4 Port Hand (can or cylinder)
- TMC 5 Safe Water (1 ball)
- TMC 6 Special (X)
- TMC 7 Starboard Hand (1 cone - pointing up)
- TMC 8 South Mark (2 cones - pointing down)
- TMC 9 West Mark (2 cones - points together)
- TMC 10 Nun
- TMC 11 VALUE INTENTIONALLY LEFT BLANK
- TMC 12 Ball
- TMC 13 Can
- TMC 14 St. Andrew's Cross
- TMC 15 Ball Over Cone
- TMC 16 Cone Over Ball
- TMC 17 Broom Point Up
- TMC 18 Perch
- TMC 19 Diamond
- TMC 20 Broom Point Down
- TMC 21 Cone (Point Upwards)
- TMC 22 Cone (Point Downwards)
- TMC 23 Upright Cross
- TMC 24 Optical Reflector
- TMC 25 Can (Open)
- TMC 26 Can (Filled)
- TMC 27 Ball (Open)
- TMC 28 Ball (Filled)
- TMC 29 Can Over Ball (Open)
- TMC 30 Cross Over Ball (Filled)
- TMC 31 Diamond Over Ball (Filled)
- TMC 32 Double Cone, Points Apart (Open)
- TMC 33 None
- TMC 34 Square
- TMC 35 "T" Shape
- TMC 36 Cross Over Ball (Open)
- TMC 37 Double ball (Open)
- TMC 38 Flag
- TMC 39 Sphere over Rhombus

TMC 40	Square
TMC 41	Rectangle, Horizontal
TMC 42	Rectangle, Vertical
TMC 43	Trapezium, Up
TMC 44	Trapezium, Down
TMC 45	Triangle, Point Up
TMC 46	Triangle, Point Down
TMC 47	Circle
TMC 48	Two Upright Crosses (One Over the Other)
TMC 49	Triangle Pointing Up Over a Circle
TMC 50	Upright Cross Over a Circle
TMC 51	Rhombus Over a Circle
TMC 52	Circle Over a Triangle Pointing Up
TMC 53	Other Shape (see INFORM)
TMC 997	Unpopulated
TMC 998	Not Applicable
TMC 999	Other

Name: Tonnage

Code: TNG

Definition: Tonnage of a sunken or stranded wreck, a hulk, or other vessel. Reference STANAG 3715.

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Tons	Long Integer	N/A	1 TON	N/A

Name: Shape of Top Mark

Code: TOP

Definition: Tabulates the various shapes of top mark.

Domain: Enumerated

TOP 0	Unknown
TOP 1	Cone, point up
TOP 2	Cone, point down
TOP 3	Sphere
TOP 4	2 spheres
TOP 5	Cylinder
TOP 6	Board
TOP 7	X-shaped
TOP 8	Cross shaped
TOP 9	Cube, point up
TOP 10	2 cones, point-to-point
TOP 11	2 cones, base-to-base
TOP 12	Diamond
TOP 13	2 cones (points upward)

TOP	14	2 cones (points downward)
TOP	15	Besom (point up)
TOP	16	Besom (point down)
TOP	997	Unpopulated
TOP	998	Not Applicable
TOP	999	Other

Name: Traversability

Code: TRA

Definition: Indicates whether the feature is traversable by foot.

Domain: Enumerated

TRA	0	Unknown
TRA	1	Traversable
TRA	2	Non-Traversable
TRA	4	Polygon
TRA	5	Pond
TRA	997	Unpopulated
TRA	998	Not Applicable
TRA	999	Other

Name: Tree Type Category

Code: TRE

Definition: Type of tree coverage.

Domain: Enumerated

TRE	0	Unknown
TRE	1	Deciduous
TRE	2	Evergreen
TRE	3	Mixed
TRE	997	Unpopulated
TRE	998	Not Applicable
TRE	999	Other

Name: Traffic Flow

Code: TRF

Definition: Encodes the general destination of traffic.

Domain: Enumerated

TRF	0	Undefined
TRF	1	Inbound
TRF	2	Outbound
TRF	3	One-way
TRF	4	Two-way
TRF	997	Unpopulated
TRF	998	Not Applicable
TRF	999	Other

Name: Recommended Track Classification

Code: TRK

Definition: Tabulates types of recommended track.

Domain: Enumerated

TRK	0	Undefined
TRK	1	Based on a system of fixed marks
TRK	2	Not based on a system of fixed marks
TRK	997	Unpopulated
TRK	998	Not Applicable
TRK	999	Other

Name: Tree Spacing Range (1)

Code: TS1

Definition: Estimated range (1) of the average distance between trees in a stand, determined in decimeters from center to center of adjacent trees.

Domain: Enumerated

TS1	0	Unknown
TS1	1	> 0 and <= 5.0
TS1	2	> 5.0 and <= 10.0
TS1	3	> 10.0 and <= 15.0
TS1	4	> 15.0 and <= 20.0
TS1	5	> 20.0 and <= 25.0
TS1	6	> 25.0 and <= 30.0
TS1	7	> 30.0 and <= 35.0
TS1	8	> 35.0 and <= 40.0
TS1	9	> 40.0 and <= 50.0
TS1	10	> 50.0 and <= 60.0
TS1	11	> 60.0 and <= 80.0
TS1	12	> 80.0 and <= 100.0
TS1	13	> 100.0 and <= 150.0
TS1	14	> 150.0
TS1	15	Not Applicable
TS1	997	Unpopulated
TS1	999	Other

Name: Tree Spacing Range (2)

Code: TS2

Definition: Estimated range (2) of the average distance between trees in a stand, determined in decimeters from center to center of adjacent trees.

Domain: Enumerated

TS2	0	Unknown
TS2	1	> 0 and <= 30.0
TS2	2	> 30.0 and <= 70.0

- TS2 3 > 70.0 and <= 100.0
- TS2 4 > 100.0
- TS2 5 Not Applicable
- TS2 997 Unpopulated
- TS2 999 Other

Name: Tree Spacing Range (3)

Code: TS3

Definition: Estimated range (3) of the average distance between trees in a stand, determined in decimeters from center to center of adjacent trees.

Domain: Enumerated

- TS3 0 Unknown
- TS3 1 >0 and <=10.0
- TS3 2 >10.0 and <=20.0
- TS3 3 >20.0 and <=30.0
- TS3 4 >30.0 and <=50.0
- TS3 5 >50.0 and <=70.0
- TS3 6 >70.0 and <=100.0
- TS3 7 >100.0 and <=150.0
- TS3 8 >150.0
- TS3 997 Unpopulated
- TS3 998 Not Applicable
- TS3 999 Other

Name: Tree Spacing Category

Code: TSC

Definition: Average distance between adjacent tree centerlines within area of feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Code: TSD

Definition: Average distance between adjacent tree centerlines within area of feature.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	1 M	N/A

Name: Traffic Scheme Part

Code: TSP

Definition: Component of the traffic routing system.

Domain: Enumerated

TSP	0	Unknown
TSP	1	Arrow
TSP	2	Outer Boundary
TSP	3	Separation Zone Area
TSP	4	Separation Zone Line
TSP	5	Separation Zone Point
TSP	6	Inbound Area
TSP	7	Outbound Area
TSP	997	Unpopulated
TSP	998	Not Applicable
TSP	999	Other

Name: Tailored Surface Roughness Description

Code: TSR

Definition: Describes a unique condition of the surface materials or surface geomorphology that may be used for mobility prediction, construction material, and landing sites, and is not covered under the standard SRD values.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Traffic Separation Scheme Classification

Code: TSS

Definition: Tabulates types of traffic separation schemes.

Domain: Enumerated

TSS	0	Undefined
TSS	1	IMO - adopted
TSS	2	Not IMO - adopted
TSS	997	Unpopulated
TSS	998	Not Applicable
TSS	999	Other

Name: Transmission Line Suspension

Code: TST

Definition: Types of suspension of power transmission lines between pylons.

Domain: Enumerated

TST	0	Unknown
TST	1	Normal Suspension
TST	2	Catenary (Over Mountains)
TST	3	Catenary (Over Water)
TST	997	Unpopulated
TST	998	Not Applicable
TST	999	Other

Name: Tower Type Category

Code: TTC

Definition: Appearance or configuration of the feature.

Domain: Enumerated

TTC	0	Unknown
TTC	1	Bridge
TTC	2	Observation/Lookout
TTC	3	VALUE INTENTIONALLY LEFT BLANK (Other)
TTC	4	Undefined
TTC	5	Light tower
TTC	6	Water tower
TTC	7	Radio tower
TTC	8	Cooling tower
TTC	9	Radar tower
TTC	10	Lookout tower
TTC	11	Television Tower
TTC	12	Fire
TTC	13	Mooring Tower, articulated loading platform , single anchor leg
TTC	14	Powerline
TTC	15	Loran
TTC	16	Control
TTC	17	Microwave
TTC	997	Unpopulated
TTC	998	Not Applicable
TTC	999	Other

Name: Transportation Use Category

Code: TUC

Definition: Identifies the primary user, function, or authority of the transportation system.

Domain: Enumerated

TUC	0	Unknown
TUC	1	Both Road and Railroad
TUC	2	Highway
TUC	3	Railroad
TUC	4	Road
TUC	6	Street
TUC	7	Through Route
TUC	8	Air Traffic Control
TUC	12	Marine
TUC	13	Air
TUC	14	Bus
TUC	17	Pedestrian
TUC	18	Pipeline

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Annex B-Attribute and Value Codes

TUC 19	Animal
TUC 20	Aircraft
TUC 21	Ship
TUC 22	Automotive
TUC 23	Boat
TUC 24	Bulk Motor Boat/Barge
TUC 25	VALUE INTENTIONALLY LEFT BLANK
TUC 26	Passenger
TUC 27	Chair lift
TUC 28	Ski tow
TUC 29	Sleigh tow
TUC 30	Cart tow
TUC 31	Motor Cycle
TUC 32	Bicycle
TUC 33	Minerals
TUC 34	Waterway
TUC 35	No Transport Use
TUC 36	Slip Road/Access Road
TUC 37	Portage
TUC 38	Canal
TUC 39	Caravan Route
TUC 40	Subway
TUC 41	Aqueduct
TUC 42	Both Road and Runway
TUC 997	Unpopulated
TUC 998	Not Applicable
TUC 999	Other

Name: Text Attribute

Code: TXT

Definition: Narrative or other description.

Domain: Lexical

Units	Format	Range	Increment	Maximum Characters
Text String	Lexical	N/A	N/A	256 Characters

Name: Underbridge Clearance Category

Code: UBC

Definition: Clearance below bridge, measured from the lowest surface level to the base of the lower of either a cross beam or the lowest bridge deck.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Code: UBD

Definition: Clearance below bridge, measured from the lowest surface level to the base of the lower of either a cross beam or the lowest bridge deck.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	.01 M	N/A

Name: Unique Identifier

Code: UID

Definition: Unique numeric feature identifier.

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Long Integer	N/A	1 Unit	N/A

Name: Underlying Material Characteristics

Code: UMC

Definition: Characteristics of underlying material composition of feature.

Domain: Enumerated

UMC 0	Unknown
UMC 1	Broken
UMC 2	Coarse
UMC 3	Decayed
UMC 4	Fine, Minute Particles
UMC 5	Gritty
UMC 6	Hard
UMC 7	Rotten
UMC 8	Soft
UMC 9	Sticky
UMC 10	Stiff
UMC 11	Streaky
UMC 12	Tenacious
UMC 13	Uneven
UMC 17	Calcareous
UMC 18	Flinty
UMC 19	Glacial
UMC 20	Ground
UMC 21	Large
UMC 22	Rocky
UMC 23	Small
UMC 24	Speckled

UMC	25	Varied
UMC	26	Volcanic
UMC	27	Medium
UMC	997	Unpopulated
UMC	998	Not Applicable
UMC	999	Other

Name: Units

Code: UNI

Definition: Identifies the units of measure. [Reference DIGEST Part 3 for Units associated with DIGEST header data.]"

Domain: Enumerated

UNI	0	Unknown
UNI	1	Meters
UNI	11	Nautical Miles
UNI	22	Feet
UNI	23	Kilometers
UNI	24	Yards
UNI	997	Unpopulated
UNI	998	Not Applicable
UNI	999	Other

Name: Usage

Code: USE

Definition: Use (identifies the primary user, function, or controlling authority).

Domain: Enumerated

USE	0	Unknown
USE	1	VALUE INTENTIONALLY LEFT BLANK
USE	2	VALUE INTENTIONALLY LEFT BLANK
USE	3	VALUE INTENTIONALLY LEFT BLANK
USE	4	National
USE	5	State
USE	6	Private
USE	7	Tribal
USE	8	Military
USE	9	VALUE INTENTIONALLY LEFT BLANK
USE	10	VALUE INTENTIONALLY LEFT BLANK (Other)
USE	11	Motel/Hotel
USE	12	Apartment
USE	13	Open
USE	14	VALUE INTENTIONALLY LEFT BLANK
USE	15	VALUE INTENTIONALLY LEFT BLANK
USE	16	City
USE	17	Advertising Billboard

USE	18	Scoreboard
USE	19	Highway Sign
USE	20	Closed
USE	21	Restricted
USE	22	Joint Military/Civilian
USE	23	International
USE	24	Unidentified Aircraft Landing Area
USE	25	Federal
USE	26	Primary/1st Order
USE	30	Secondary/2nd Order
USE	31	Tertiary/3rd Order
USE	32	Insular
USE	33	Provincial
USE	37	Interstate
USE	41	Industrial
USE	42	Commercial
USE	43	Institutional
USE	44	Residential
USE	45	Agricultural
USE	48	Decoy
USE	49	Civilian/Public
USE	50	Limited
USE	51	Telegraph
USE	52	Telephone
USE	53	Power
USE	57	Marine
USE	60	Avalanche
USE	61	Refugee
USE	62	Prisoner
USE	68	Animal sanctuary
USE	69	Levee/Dike
USE	70	Reserve/Reservation
USE	73	Terminus/Terminal
USE	74	Low Altitude Enroute
USE	75	High Altitude Enroute
USE	76	Low and High Altitude Enroute
USE	77	Short Take-off Landing Approach
USE	78	Visual Approach
USE	79	Non-Precision Instrument Approach
USE	80	Precision Instrument Approach
USE	81	Entry
USE	82	Exit
USE	83	Transaction
USE	84	Feeder
USE	85	Initial Approach Fix

USE	86	Final Approach Fix
USE	87	Visual Descent Point
USE	88	Missed Approach Point
USE	89	Radar
USE	90	Mileage Break Down
USE	91	NAVAID Changeover
USE	92	Altimeter Change
USE	93	Compulsory Reporting Points
USE	94	Non-Compulsory Reporting Points
USE	95	Alert Apron/Hardstand
USE	96	Operational Apron/Hardstand
USE	97	Hangar/Apron
USE	98	Base Flight Apron
USE	99	Engine Test Pad/Apron
USE	100	Transient Apron
USE	101	Depot Apron
USE	102	Stub Apron
USE	103	Dispersal Hardstand
USE	104	Pad Hardstand
USE	105	Refueling Hardstand
USE	106	Parking Hardstand
USE	107	Engine Run-up Hardstand
USE	108	Firing-In Hardstand
USE	109	Compass Rose Hardstand
USE	110	Maintenance Hardstand
USE	111	Quaternary/4th Order
USE	112	Quintary/5th Order
USE	113	Regional
USE	114	Communal
USE	115	Snow Shed
USE	116	Rock Shed
USE	117	Outfall
USE	118	Intake
USE	119	Berthing of vessels
USE	120	Recreational
USE	121	Aircraft Facility/airport reference point
USE	122	Firebreak
USE	123	Tourist
USE	124	Irrigation
USE	125	Retaining
USE	127	As a Causeway
USE	128	Mixed Urban or built-up Land
USE	129	Military District
USE	130	Transportation
USE	131	Flood Barrage

USE	132	Container
USE	133	Single Point Mooring
USE	134	Utilities and Communication
USE	136	As a Fill
USE	139	Fill
USE	140	Medical
USE	141	Forest Preserve
USE	142	Flood Control and/or Rate Measurement
USE	143	ARIP Initial Point
USE	144	ARCP Control Point
USE	145	Nav Check Point
USE	146	Exit or End
USE	147	Entry or Starting
USE	148	Anchor Point
USE	150	Alternate Entry
USE	151	Alternate Exit
USE	152	Alternate Entry or Exit
USE	153	Turning
USE	154	Compass Adjustment
USE	155	Prohibited Area
USE	156	Timeball
USE	157	Clock
USE	158	Reserved
USE	159	Mandatory
USE	160	Maritime Station
USE	900	Butts
USE	901	School
USE	986	Military District
USE	991	Not Applicable
USE	992	Drag Strip
USE	993	Filtration Pond
USE	994	Dugout
USE	995	Drinking Water
USE	996	Triangulation
USE	997	Cable Sign/Pipeline Indicator
USE	998	Sea-Plane landing area
USE	999	Other

Name: Urban Street Pattern

Code: USP

Definition: The predominant geometric configuration of streets found within the delineated area of the feature.

Domain: Enumerated

USP	0	Unknown
USP	2	Rectangular/Grid-Regular
USP	3	Rectangular/Grid-Irregular

USP	4	Curvilinear (cluster)
USP	6	Concentric/Radial-Regular
USP	7	Concentric/Radial-Irregular
USP	9	Mixed-Curvilinear (cluster) and Rectangular (grid)
USP	10	Mixed-Concentric/Radial and Rectangular (grid)
USP	11	Mixed-Curvilinear (cluster) and Concentric/Radial
USP	12	VALUE INTENTIONALLY LEFT BLANK (Other)
USP	13	Linear Strip
USP	997	Unpopulated
USP	998	Not Applicable
USP	999	Other

Name: UTM Grid Northing

Code: UT1

Definition: Full 7 digits of the UTM grid coordinate Northing value. (UTS, along with the last five digits of both UT1 and UT2 can designate a feature's coordinates on the earth's surface.)

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	8 Characters

Name: UTM Grid Easting

Code: UT2

Definition: Full 6 digits of the UTM grid coordinate Easting value. (UTS along with the last five digits of both UT1 and UT2 can designate a feature's coordinates on the earth's surface.)

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	8 Characters

Name: UTM Square Identification

Code: UTS

Definition: Locates feature to within a specific 100,000 m square, by a 5-digit alphanumeric designation. 1st two numbers are the UTM grid zone, 3rd letter is a specific 6-degree x 8-degree block within the grid zone (the unique Grid Zone Designation), and the last two letters are the 100,000 m square.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	5 Characters

Name: UTM Grid Zone (1)

Code: UZ1

Definition: Two-character grid zone identifier.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	2 Characters

Name: UTM Grid Zone (2)

Code: UZ2

Definition: Two-character grid zone identifier.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	2 Characters

Name: Variation Anomaly Value With Greater Precision

Code: VA1

Definition: The difference between the magnetic variation of the disturbance area and the magnetic variation of the surrounding area.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Degrees	Floating Point	N/A	0.1 DEG	N/A

Name: Value

Code: VAL

Definition: Generic numeric (integer) value.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Short Integer	-32767 to 32767	1 Unit	N/A

Name: Variation Anomaly Value

Code: VAV

Definition: The difference between the magnetic variation of the disturbance area and the magnetic variation of the surrounding area.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Degrees	Short Integer	0 to 359	1 DEG	N/A

Name: Vertical Clearance, Closed With Greater Precision

Code: VC1

Definition: Encodes the vertical clearance of an object in closed condition, e.g. a closed lifting bridge, measured from the horizontal plane towards the object overhead.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Vertical Clearance, Opened With Greater Precision

Code: VC2

Definition: Encodes the vertical clearance of an object in opened condition, e.g. an open lifting bridge, measured from the horizontal plane towards the object overhead.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Vertical Clearance, Safe With Greater Precision

Code: VC3

Definition: Encodes the safe vertical clearance of an object measured from the horizontal plane toward the object.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Void Collection Attribute

Code: VCA

Definition: Reason data is not collected.

Domain: Enumerated

- VCA 0 Unknown
- VCA 1 Data Not Requested By User
- VCA 2 Area Too Rough to Collect
- VCA 3 No Available Imagery
- VCA 4 Different Height Threshold Within Data Block
- VCA 5 Low Data Collection Criteria
- VCA 6 No Available Map Source
- VCA 7 No Suitable Imagery
- VCA 8 Data Not Required
- VCA 997 Unpopulated
- VCA 998 Not Applicable
- VCA 999 Other

Name: Vertical Clearance, Closed

Code: VCC

Definition: Encodes the vertical clearance of an object in closed condition, e.g. a closed lifting bridge, measured from the horizontal plane towards the object overhead.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Vertical Clearance, Opened

Code: VCO

Definition: Encodes the vertical clearance of an object in opened condition, e.g. an open lifting bridge, measured from the plane towards the object overhead.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Vertical Clearance, Safe

Code: VCS

Definition: Encodes the safe vertical clearance of an object measured from the plane toward the object overhead.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Void Collection Type

Code: VCT

Definition: Identifies type of missing information.

Domain: Enumerated

VCT 0 Unknown
 VCT 1 Relief
 VCT 2 VALUE INTENTIONALLY LEFT BLANK (Other)
 VCT 997 Unpopulated
 VCT 998 Not Applicable
 VCT 999 Other

Name: Vertical (Sounding) Datum Category

Code: VDC

Definition: The tidal datum to which soundings and drying heights are referenced. It is usually taken to correspond to a low water stage of the tide. (Also known as Chart Sounding Datum).

Domain: Enumerated

VDC 0 Unknown
 VDC 1 VALUE INTENTIONALLY LEFT BLANK
 VDC 2 High Water
 VDC 3 Higher High Water
 VDC 4 Indian Spring Low Water
 VDC 5 Low Water
 VDC 6 Lower Low Water

VDC 7	Mean High Water
VDC 8	Mean High Water Neaps
VDC 9	Mean High Water Springs
VDC 10	Mean Higher High Water
VDC 11	Mean Low Water
VDC 12	Mean Low Water Neaps
VDC 13	Mean Low Water Springs
VDC 14	Mean Lower Low Water
VDC 15	Mean Sea Level
VDC 16	Mean Tide Level
VDC 17	Neap Tide
VDC 18	Spring Tide
VDC 19	Mean Lower Low Water Springs
VDC 20	Lowest Astronomical Tide
VDC 21	Chart Datum (Unspecified)
VDC 22	Highest Astronomical Tide
VDC 24	Mean Higher High Water Springs
VDC 26	Highest Normal High Water
VDC 28	Highest High Water
VDC 30	Indian Spring High Water
VDC 90	Lowest Low Water
VDC 91	Lowest Low Water Springs
VDC 92	Approximate Mean Llow Water Springs
VDC 93	Low Water Springs
VDC 94	Approximate Lowest Astronomical Tide
VDC 95	Nearly Lowest Low Water
VDC 96	Approximate Mean Low Water
VDC 97	Approximate Mean Lower Low Water
VDC 98	Approximate Mean Sea Level
VDC 99	High Water Springs
VDC 100	Equinoctial Spring Low Water
VDC 101	Local Datum
VDC 102	International Great Lakes Datum 1985
VDC 103	Mean Water Level
VDC 104	Lower Low Water Large Tide
VDC 105	Higher High Water Large Tide
VDC 106	Highest Astronomical Tide
VDC 997	Unpopulated
VDC 998	Not Applicable
VDC 999	Other

Name: Vehicle Capacity (Number of Vehicles)

Code: VEC

Definition: Number of vehicles that a feature can accommodate.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Vehicles	Short Integer	-32767 to 32767	1 VEHICLE	N/A

Name: Vegetation Characteristics

Code: VEG

Definition: Type of plant or plantings.

Domain: Enumerated

- VEG 0 Unknown
- VEG 1 Dry Crops
- VEG 2 VALUE INTENTIONALLY LEFT BLANK
- VEG 3 VALUE INTENTIONALLY LEFT BLANK
- VEG 4 Rice Paddies
- VEG 5 Agriculture with scattered forests or rows of trees
- VEG 6 Cranberry
- VEG 7 Peat
- VEG 8 Pasture, meadow, steppe
- VEG 9 Grassland with scattered trees
- VEG 10 Tropical Grass
- VEG 11 Casuarina
- VEG 12 Coniferous
- VEG 16 Nipa Palm
- VEG 17 Palm
- VEG 18 Filao
- VEG 19 Mangrove
- VEG 20 Grove
- VEG 22 Wheat
- VEG 23 Corn
- VEG 24 Deciduous
- VEG 25 Evergreen
- VEG 26 Cork-Oak
- VEG 27 Fir
- VEG 28 Beech
- VEG 29 Eucalyptus
- VEG 30 Oak
- VEG 31 Pine
- VEG 32 Walnut
- VEG 33 Maple
- VEG 34 Poplar
- VEG 35 Olive
- VEG 36 Chestnut
- VEG 37 Larch
- VEG 38 Cypress
- VEG 39 Peach
- VEG 40 Apple

VEG	41	Carob
VEG	42	Almond
VEG	43	Citrus
VEG	44	Elm
VEG	45	Ilex
VEG	46	Birch
VEG	47	Ash
VEG	48	Hazel
VEG	49	Mixed Deciduous
VEG	50	Mixed Trees
VEG	51	Herb/Shrub
VEG	52	Forest Clearing
VEG	53	Brushland open to medium density
VEG	54	Brushland medium to dense density
VEG	55	With Trees
VEG	56	Without Trees
VEG	57	Agriculture with scattered trees or rows of trees
VEG	58	Reed
VEG	59	Moss
VEG	60	Kelp
VEG	61	Sea Weed
VEG	62	Sea Grass
VEG	63	Saragasso
VEG	64	Wet
VEG	65	Alpine
VEG	66	Garden
VEG	67	Heath/Heathland
VEG	997	Unpopulated
VEG	998	Not Applicable
VEG	999	Other

Name: Quality of Vertical Measurement

Code: VEM

Definition: Qualifiers of the various values of vertical measurement.

Domain: Enumerated

VEM	0	Undefined
VEM	1	Measured
VEM	2	Estimated
VEM	997	Unpopulated
VEM	998	Not Applicable
VEM	999	Other

Name: Volcanic Geologic Type

Code: VGT

Definition: The type of geologic formation created by volcanic activity.

Domain: Enumerated

VGT	0	Unknown
VGT	1	Volcano
VGT	2	Cinder Cone
VGT	3	Shield
VGT	4	Caldera
VGT	5	Composite
VGT	997	Unpopulated
VGT	998	Not Applicable
VGT	999	Other

Name: Predominant Vegetation Height Range (1)

Code: VH1

Definition: Range of predominant height (in meters) of vegetation within delineated area of feature (First Range).

Domain: Enumerated

VH1	0	Unknown
VH1	1	<= 2
VH1	2	> 2 and <= 5
VH1	3	> 5 and <= 10
VH1	4	> 10 and <= 15
VH1	5	> 15 and <= 20
VH1	6	> 20 and <= 30
VH1	7	> 30 and <= 40
VH1	8	> 40
VH1	9	> 20 and <= 25
VH1	10	> 25 and <= 30
VH1	11	> 30 and <= 35
VH1	12	> 35
VH1	13	Not Applicable
VH1	997	Unpopulated
VH1	999	Other

Name: Predominant Vegetation Height Range (2)

Code: VH2

Definition: Range of predominant height (in meters) of vegetation within delineated area of feature (Second Range).

Domain: Enumerated

VH2	0	Unknown
VH2	1	<= 5

VH2 2 > 5 and <= 20
VH2 3 > 20
VH2 4 Not Applicable
VH2 997 Unpopulated
VH2 999 Other

Name: Predominant Vegetation Height Range (3)

Code: VH3

Definition: A range of predominant height (in meters) of vegetation within delineated area of feature (Third Range).

Domain: Enumerated

VH3 0 Unknown
VH3 1 >0 and <=5
VH3 2 >5 and <=10
VH3 3 >10 and <=20
VH3 4 >20 and <=40
VH3 5 >40
VH3 997 Unpopulated
VH3 998 Not Applicable
VH3 999 Other

Name: Visibility of Light

Code: VIS

Definition: Encodes the specific visibility of light.

Domain: Enumerated

VIS 0 Undefined
VIS 1 High intensity
VIS 2 Low intensity
VIS 3 Faint
VIS 4 Intensified
VIS 5 Unintensified
VIS 6 Visibility deliberately restricted
VIS 7 Obscured
VIS 8 Partially obscured
VIS 997 Unpopulated
VIS 998 Not Applicable
VIS 999 Other

Name: Vertical Obstruction Identifier

Code: VOI

Definition: Identification code that uniquely identifies a feature that is a vertical obstruction to low-level flight. (1-2 First two characters of NA4 - Country Code; 3-6 World Aeronautical Chart (WAC) Identifier; 7-10 Unique Obstruction Identification Number; 11 Producer Code)

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	11 Characters

Name: Vegetation Roughness Category

Code: VRC

Definition: An indexed value indicating the roughness of vegetation.

Domain: Enumerated

VRC 0	Unknown
VRC 1	0.00 100% reduction
VRC 2	0.05
VRC 3	0.10
VRC 4	0.15
VRC 5	0.20
VRC 6	0.25
VRC 7	0.30
VRC 8	0.35
VRC 9	0.40
VRC 10	0.45
VRC 11	0.50 50% reduction
VRC 12	0.55
VRC 13	0.60
VRC 14	0.65
VRC 15	0.70
VRC 16	0.75
VRC 17	0.80
VRC 18	0.85
VRC 19	0.90
VRC 20	0.95
VRC 21	1.00 0% reduction
VRC 22	Not evaluated area where development has precluded evaluation of soil
VRC 23	Not Applicable
VRC 997	Unpopulated
VRC 999	Other

Name: Vertical Reference Category

Code: VRR

Definition: Relative location referenced to sounding datum, unless otherwise indicated.

Domain: Enumerated

VRR 0	Unknown
VRR 1	Above Surface/Does Not Cover (at High Water)
VRR 2	Awash at Sounding Datum
VRR 4	Below Surface/Submerged
VRR 8	Covers and Uncovers
VRR 9	Not Applicable

VRR 997 Unpopulated

VRR 999 Other

Name: Minimum Traveled Way Width

Code: WD1

Definition: Minimum width of the traveled way, excluding hard pavements and shoulders (in decimeters).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Decimeters	Short Integer	-32767 to 32767	1 DM	N/A

Name: Total Usable Width

Code: WD2

Definition: Total usable width including pavements and hard shoulders (in decimeters).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Decimeters	Short Integer	-32767 to 32767	1 DM	N/A

Name: Military Gap Width

Code: WD3

Definition: The minimum horizontal bridging distance between banks (in decimeters).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Decimeters	Short Integer	-32767 to 32767	1 DM	N/A

Name: Wet Gap Width

Code: WD4

Definition: The wet gap width at low tide (in meters).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Width Top

Code: WD5

Definition: The width at the top of a feature (in meters).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Width Bottom

Code: WD6

Definition: The width at the bottom of a feature (in meters).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Water Depth Average

Code: WDA

Definition: The average water depth (in meters).

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Name: Date of report

Code: WDT

Definition: The date a non-submarine contact was reported. Reference STANAG 3715.

Domain: ASCII text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII text	N/A	N/A	8 Characters

Name: Well Feature Type

Code: WFT

Definition: Type of well.

Domain: Enumerated

WFT 0	Unknown
WFT 1	Water hole
WFT 2	Walled-in
WFT 3	Artesian Well
WFT 4	Fountain
WFT 5	Dug or Drilled Well
WFT 997	Unpopulated
WFT 998	Not Applicable
WFT 999	Other

Name: Width With Greater Precision

Code: WGP

Definition: A measurement of the shorter of two perpendicular axes: for a round feature, WGP shall equal LGP or LEN (if present).

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Width

Code: WID

Definition: A measurement of the shorter of two linear axes. For a square feature, measure either axis. For a round feature, width shall be equal to LEN. For a bridge, the width is the measurement perpendicular to the axis between the abutments.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-32767 to 32767	1 M	N/A

Code: WKT

Definition: Type of wreck as listed in Non Submarine Contacts list. Reference STANAG 3715.

Domain: Enumerated

- WKT 0 Unknown
- WKT 1 Anomalies
- WKT 2 Aircraft
- WKT 3 Auxiliary
- WKT 4 Battleship
- WKT 5 Barge
- WKT 6 Buoy
- WKT 7 Caisson
- WKT 8 Aircraft Carrier
- WKT 9 Cargo
- WKT 10 Subchaser
- WKT 11 Coaster
- WKT 12 Cruiser
- WKT 13 Ship Debris (plates, misc. metal)
- WKT 14 Destroyer, Destroyer Escort, Corvette
- WKT 15 Dredge
- WKT 16 Drill Vessel or Drill Rig
- WKT 17 Explosives
- WKT 18 Fishing Vessel
- WKT 19 Fishing Reef
- WKT 20 Ferry
- WKT 21 Frigate
- WKT 22 Gunboat
- WKT 23 Hospital Ship
- WKT 24 Hydrographic Survey, Air Cushion, Hydrofoil
- WKT 25 Junk
- WKT 26 Lash Vessel

WKT 27	Landing Craft, Infantry (LCI)
WKT 28	Gas Carrier, Natural Petroleum
WKT 29	Landing Ship, Infantry (LSI)
WKT 30	Landing Ship, Tank (LST)
WKT 31	Lightship
WKT 32	Minesweeper, Minelayer
WKT 33	Net Tender
WKT 34	Bulk Carrier
WKT 35	Obstruction
WKT 36	Passenger Cargo
WKT 37	Patrol Boat
WKT 38	Pinnacle Rock
WKT 39	Roll On - Roll Off
WKT 40	Sailing Ship
WKT 41	Sea Bee, Lash Barge
WKT 42	Submarine Float
WKT 43	Submarine
WKT 44	Survey Vessel
WKT 45	Tanker
WKT 46	Tender, Submarine, Airplane, Oil Rig
WKT 47	Target
WKT 48	Torpedo Boat
WKT 49	Transport
WKT 50	Tug
WKT 51	Trawler
WKT 52	Very Large Container
WKT 53	Well Head
WKT 54	Yacht
WKT 997	Unpopulated
WKT 998	Not Applicable
WKT 999	Other

Name: Water Level Effect

Code: WLE

Definition: Encodes the possible effects of the surrounding water.

Domain: Enumerated

WLE 0	Unknown
WLE 1	Partly submerged at high water
WLE 2	Always dry
WLE 3	Always under water/submerged
WLE 4	Covers and uncovers
WLE 5	Awash
WLE 6	Drying
WLE 7	Subject to Inundation or Flooding
WLE 997	Unpopulated

WLE 998 Not Applicable

WLE 999 Other

Name: Width of Crest

Code: WOC

Definition: Predominant distance across the crest of the dam, measured perpendicular to the centerline of its length along the crest.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Work in Progress Category

Code: WPC

Definition: Type of work in progress.

Domain: Enumerated

- WPC 0 Unknown
- WPC 1 Land Reclamation
- WPC 2 Construction of Structures
- WPC 997 Unpopulated
- WPC 998 Not Applicable
- WPC 999 Other

Name: Port Index

Code: WPI

Definition: Unique maritime port identifier.

Domain: ASCII Text

Units	Format	Range	Increment	Maximum Characters
Text String	ASCII Text	N/A	N/A	24 Characters

Name: Waypoint Description Code

Code: WPT

Definition: The name/type of a named waypoint

Domain: Enumerated

- WPT 0 Unknown
- WPT 1 Airport waypoint
- WPT 2 Essential waypoint
- WPT 3 Off-airway waypoint
- WPT 4 Runway waypoint
- WPT 5 Non-essential waypoint
- WPT 6 Transition essential waypoint
- WPT 7 VOR, VORDME, VORTAC
- WPT 8 End of continuous airway procedure

- WPT 9 Uncharted airway intersection
- WPT 10 ATC compulsory waypoint
- WPT 11 Gateway fix
- WPT 12 First leg of missed approach
- WPT 13 Final approach fix
- WPT 14 Holding fix
- WPT 15 Final approach course fix
- WPT 16 Missed approach point
- WPT 997 Unpopulated
- WPT 998 Not Applicable
- WPT 999 Other

Name: Wreck Classification

Code: WRK

Definition: Tabulates types of wrecks.

Domain: Enumerated

- WRK 0 Undefined
- WRK 1 Non-dangerous wreck
- WRK 2 Dangerous wreck
- WRK 3 Remains of wreck/foul area
- WRK 4 Wreck showing mast/masts
- WRK 5 Wreck showing any portion of hull or superstructure
- WRK 997 Unpopulated
- WRK 998 Not Applicable
- WRK 999 Other

Name: Wreck Number

Code: WRN

Definition: A unique number identifying a wreck or other non-submarine contact. Reference STANAG 3715.

Domain: Long Integer

Units	Format	Range	Increment	Maximum Characters
Numeric	Long Integer	N/A	1 Unit	N/A

Name: Waste/Scrap Type Category

Code: WSC

Definition: Identifies type of waste/scrap within defined feature limits.

Domain: Enumerated

- WSC 0 Unknown
- WSC 1 Automobile
- WSC 997 Unpopulated
- WSC 998 Not Applicable
- WSC 999 Other

Name: Source of report

Code: WSR

Definition: The source of a reported non-submarine contact. Reference STANAG 3715.

Domain: Enumerated

WSR 0	Unknown
WSR 8	Report SONAR verified
WSR 9	Report MAD verified
WSR 10	Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468
WSR 11	US Losses - Director, Fleet Operations
WSR 12	H.O. Files
WSR 13	COMNAVPAC
WSR 14	COMNAVFE
WSR 15	H.O. Chart Reports and Charts
WSR 16	H.O. Notice to Mariners
WSR 17	Lloyds and Marine Underwriter's Reports
WSR 18	The Imperial Japanese Navy in WW II
WSR 19	U.S. Navy at War 1941-1945
WSR 20	German, Japanese, and Italian Submarine Losses in WW II
WSR 21	Swedish Merchant Losses 1914-1920
WSR 22	H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946
WSR 23	American Ship Casualties of WW I
WSR 24	U.S. Coast Guard and Geodetic Survey Records
WSR 25	Tenth Fleet Records (OP-374)
WSR 26	Naval Losses of All Nations 9/3/39 - 8/15/45
WSR 27	Italian Naval and Merchant Losses, WW II
WSR 28	List of Danish War Losses 1914 - 1918
WSR 29	British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918
WSR 30	Abstracts of Losses 1914 - 1918
WSR 31	British and Foreign Merchant Ships Lost During WW II
WSR 32	A List of Neutral Ships Sunk by Germany
WSR 33	Greek Losses WW II
WSR 34	Italian Naval Losses - WW I
WSR 35	Spanish Merchant Losses - WW I
WSR 36	Netherlands Merchant Losses - WW I
WSR 37	Italian Merchant Losses - WW I
WSR 38	Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918
WSR 39	Reports of Known Wrecks by U.S. Coast Guard Districts 1950
WSR 40	France - Naval and Merchant Losses during WW I
WSR 41	Sonar Reports and MAD Reports, U.S. Navy
WSR 42	Maritime Commission also ONI List WW I
WSR 43	Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918
WSR 44	Merchant Vessels of the U.S. Lost (Commerce Department)
WSR 45	Naval Chronology WW II
WSR 46	Ship Visit Reports

- WSR 47 Spanish Hydrographic Office
- WSR 48 British Admiralty Wreck Charts 1921
- WSR 49 Swedish Board of Shipping and Navigation, Hydrographic Dept.
- WSR 50 British Admiralty Wreck Charts, 1961
- WSR 51 Portugal Hydrographic Office
- WSR 52 Italian Navy Survey
- WSR 53 State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date)
- WSR 54 Italian Naval Surveys Charts and Lists
- WSR 55 ONI
- WSR 56 Value Intentionally Left Blank
- WSR 57 R.C.N. Wreck List (RCN Pub. 272)
- WSR 58 Dutch Wreck List
- WSR 59 North Sea Fishing Charts
- WSR 60 Photographs of Pinnacles and Miscellaneous Metals
- WSR 61 Coast and Geodetic Survey (National Ocean Survey) Charts
- WSR 62 Radio Navigation Warning
- WSR 63 OMAN National Hydrographic Office
- WSR 997 Unpopulated
- WSR 998 Not Applicable
- WSR 999 Other

Name: Width of Second Traveled Way

Code: WT2

Definition: Minimum width of a second traveled way implementing the shorter width distance, excluding hard pavements and shoulders (in decimeters).

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Decimeters	Floating Point	-32767 to 32767	1 DM	N/A

Name: Weather Type Category

Code: WTC

Definition: Weather conditions under which a feature is usable.

Domain: Enumerated

- WTC 0 Unknown
- WTC 1 All Weather
- WTC 2 Fair/Dry Weather
- WTC 3 Winter Only
- WTC 4 All Weather (Limited Traffic Due to Weather)
- WTC 997 Unpopulated
- WTC 998 Not Applicable
- WTC 999 Other

Name: Wall Type Identifier

Code: WTI

Definition: Type of wall structure category.

Domain: Enumerated

WTI	0	Unknown
WTI	1	Standing
WTI	2	Retaining
WTI	3	VALUE INTENTIONALLY LEFT BLANK (Other)
WTI	997	Unpopulated
WTI	998	Not Applicable
WTI	999	Other

Name: Winter Tree Cover Density Code

Code: WTR

Definition: Coded value indicating percent of winter canopy closure within delineated area of feature.

Domain: Enumerated

WTR	0	Unknown
WTR	1	<= 25
WTR	2	> 25 and <= 50
WTR	3	> 50 and <= 75
WTR	4	> 75
WTR	5	Not Applicable
WTR	997	Unpopulated
WTR	999	Other

Name: Water Velocity Average 1

Code: WV1

Definition: Range of water velocity, estimated in meters/second within delineation of feature exclusive of high water due to runoff or low water due to drought.

Domain: Enumerated

WV1	0	Unknown
WV1	1	<= 1.5
WV1	2	> 1.5
WV1	3	Not Applicable
WV1	997	Unpopulated
WV1	999	Other

Name: Water Velocity Average

Code: WVA

Definition: Average water velocity, estimated in meters/second within delineation of feature exclusive of high water due to runoff or low water due to drought.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters/Sec.	Short Integer	-32767 to 32767	1 M/S	N/A

Name: Primary Display Mode

Code: XPD

Definition: The normal display status of the feature.

Domain: Enumerated

XPD	0	Unknown
XPD	1	Normal Display (On)
XPD	2	Display Partially Suppressed
XPD	3	Display Fully Suppressed
XPD	997	Unpopulated
XPD	998	Not Applicable
XPD	999	Other

Name: Spatial Alignment

Code: XSA

Definition: The existence status of the feature's spatial alignment.

Domain: Enumerated

XSA	0	Unknown
XSA	1	Alignment Definite
XSA	2	Reported Alignment
XSA	3	Approximate Alignment
XSA	4	Feature Connector
XSA	997	Unpopulated
XSA	998	Not Applicable
XSA	999	Other

Name: Water Depth Mean (Seasonal High Water)

Code: YDH

Definition: The average seasonal high water depth range (in meters).

Domain: Enumerated

YDH	0	Unknown
YDH	1	<=0.8
YDH	2	>0.8 and <=1.6
YDH	3	>1.6 and <=2.4
YDH	4	>2.4
YDH	997	Unpopulated
YDH	998	Not Applicable
YDH	999	Other

Name: Water Depth Mean (Seasonal Low Water)

Code: YDL

Definition: The average seasonal low water depth range (in meters).

Domain: Enumerated

- YDL 0 Unknown
- YDL 1 <=0.8
- YDL 2 >0.8 and <=1.6
- YDL 3 >1.6 and <=2.4
- YDL 4 >2.4
- YDL 997 Unpopulated
- YDL 998 Not Applicable
- YDL 999 Other

Name: Length of Greater Precision

Code: YLN

Definition: A measurement of the longer of two axis capable of being expressed in decimal meter units.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Decimeters	Floating Point	-32767 to 32767	1 DM	N/A

Name: Service Branch

Code: YSU

Definition: Identifies a specific military organization.

Domain: Enumerated

- YSU 0 Unknown
- YSU 1 Air Force
- YSU 2 Army
- YSU 3 Coast Guard
- YSU 4 Marines
- YSU 5 Navy
- YSU 6 VALUE INTENTIONALLY LEFT BLANK (Other)
- YSU 7 Joint
- YSU 997 Unpopulated
- YSU 998 Not Applicable
- YSU 999 Other

Name: Water Velocity Mean (Seasonal High Water)

Code: YVH

Definition: Average normal seasonal high water velocity range estimated in meters/second, within delineation of the feature, exclusive of high water due to runoff or low water due to drought.

Domain: Enumerated

- YVH 0 Unknown

YVH 1 <=0.5
YVH 2 >0.5 and <=1.5
YVH 3 >1.5 and <=2.5
YVH 4 >2.5
YVH 997 Unpopulated
YVH 998 Not Applicable
YVH 999 Other

Name: Water Velocity Mean (Seasonal Low Water)

Code: YVL

Definition: Average normal seasonal low water velocity range estimated in meters/second, within delineation of the feature, exclusive of high water due to runoff or low water due to drought.

Domain: Enumerated

YVL 0 Unknown
YVL 1 <=0.5
YVL 2 >0.5 and <=1.5
YVL 3 >1.5 and <=2.5
YVL 4 >2.5
YVL 997 Unpopulated
YVL 998 Not Applicable
YVL 999 Other

Name: Water Quality Attribute

Code: YWQ

Definition: Description of the drinking quality of water.

Domain: Enumerated

YWQ 0 Unknown
YWQ 1 Potable
YWQ 2 Treatable
YWQ 3 Contaminated
YWQ 997 Unpopulated
YWQ 998 Not Applicable
YWQ 999 Other

Name: Depth to Water Table

Code: YWT

Definition: Ranges of average depth (meters) of a zone of saturation except where bounded by an impermeable body, in which no water table exists.

Domain: Enumerated

YWT 0 Unknown
YWT 1 >0 and <=0.3
YWT 2 >0.3 and <=1.2
YWT 3 >1.2
YWT 4 At ground surface

YWT 997 Unpopulated
 YWT 998 Not Applicable
 YWT 999 Other

Name: Lowest Z-value

Code: ZV1

Definition: Elevation above a given datum to the lowest portion of the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-400 to 30000	1 M	N/A

Name: Highest Z-Value

Code: ZV2

Definition: Elevation above a given datum to the highest portion of the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-400 to 30000	1 M	N/A

Name: Airfield/Aerodrome elevation

Code: ZV3

Definition: The highest point of an airport's usable runways measured in meters from mean sea level.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Meters	Short Integer	-400 to 30000	1 M	N/A

Name: Lowest Z-value With Greater Precision

Code: ZV6

Definition: Elevation above a given datum to the lowest portion of the feature.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

Name: Highest Z-Value With Greater Precision

Code: ZV7

Definition: Elevation above a given datum to the highest portion of the feature.

Domain: Floating Point

Units	Format	Range	Increment	Maximum Characters
Meters	Floating Point	N/A	0.1 M	N/A

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Annex B-Attribute and Value Codes

Name: Highest Z-Value

Code: ZVF

Definition: Height measured in feet above a given datum to the highest portion of the feature.

Domain: Short Integer

Units	Format	Range	Increment	Maximum Characters
Feet	Short Integer	-1200 to 32767	1 FT	N/A