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Enumeration and Bit Encoded Values for Use with Protocols for Distributed Interactive Simulation Applications

**This document accompanies IEEE Std 1278.1-1995 and
IEEE Std 1278.1A-1998**

Institute for Simulation and Training
3280 Progress Drive
Orlando, FL 32826

University of Central Florida
Division of Sponsored Research

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Introduction

This 1997 revision of what is popularly called "the DIS enumeration document" has been prepared by the Institute for Simulation and Training (IST). The original contents of this document began as a set of separate appendices to the early versions of the Standard for Distributed Interactive Simulation (DIS) Protocol Data Units (PDUs). These appendices were eventually bound together under common cover with a single title and published as IST-CR-93-19. Stewardship of this document was then temporarily transferred to the Joint Interoperability Engineering Organization (JIEO), which substantially increased the level and amount of detail. The next revision by IST, published as IST-CR-93-46, retained the many substantive contributions of JIEO, while restructuring the document for the first time as the single, integrated source for all enumeration fields found in the DIS PDUs. At this time a changes control process was initiated for all changes to this document.

Change History

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1.0 Overview

This document specifies the numerical values and associated definitions for those DIS PDU fields which are identified as enumerations in IEEE 1278.1-1995. Compliance with this document is mandatory for participation in a DIS exercise.

The various fields are grouped according to the PDUs in which they appear, and the PDUs are then grouped by PDU family, constituting Sections 3-9 below.

2.0 Acronyms

AA.....	Anti-Aircraft
AAA	Anti-Aircraft Artillery
AABNCP.....	Advanced Airborne Command Post
AAC	Anti-Aircraft Common
AAV	Amphibious Assault Vehicle
AAWS-M.....	Advanced Antitank Weapon System--Medium
ABS.....	Amphibious Bridging System
ACV	Armored Command Vehicle
AD.....	Air Defense
ADAM.....	Area Denial Artillery/Antipersonnel Munition
ADATS.....	Air Defense Anti-Tank System
ADCAP	Advanced Capability
ADF	Air Defense Fighter (F-16A variant)
ADPCM	Adaptive Differential Pulse Code Modulation
ADSM.....	Air Defense Suppression Missile
ADV	Air Defense Variant (British Tornado variant)
AEW	Airborne Early Warning
AEW&C	Airborne Early Warning & Control
AFARV	Armored, Forward-Area, Rearm Vehicle
AFAS	Advanced Field Artillery System
AFS.....	Auxiliary Fleet Support
AFSK.....	Audio Frequency Shift Keying
AHI.....	Anti-Helicopter Mine
ALARM.....	Air-Launched Anti-Radiation Missile (UK)
ALCM	Air Launched Cruise Missile
ALSV	Armored Logistics Support Vehicle
ALWP	Advance Light Weight ???
AM.....	Amplitude Modulation
AMC	Armored Mortar Carrier
AMRAAM.....	Advanced Medium Range Air-to-Air Missile
AMV	Armored Maintenance Vehicle
AO.....	Auxiliary Oiler
AOL	Auxiliary Oiler, Light
AOT	Auxiliary Oiler, Transport
AP	Armor Piercing
APC	Armored Personnel Carrier
APERS.....	Antipersonnel
API.....	Armor Piercing Incendiary
APV	Armored Patrol Vehicle
ARL	Airborne Reconnaissance--Low
ARM	Antiradiation Missile
ARM-D.....	Antiradiation Missile Decoy

ARV Armored Recovery Vehicle
 ASCII..... American Standard Code for Information Interchange
 ASM..... Air-to-Surface Missile
 ASMP French "Air-Sol Moyenne Portee;" Air-to-surface medium-range missile
 ASROC Anti-Submarine Rocket
 ASV-XC
 ASW..... Anti-Submarine Warfare
 AT Anti-Tank
 ATAM Air-To-Air Mistral missile
 ATBM Anti-Tactical Ballistic Missile
 ATGW..... Anti-Tank Guided Weapon
 ATTV All-Terrain Tow Vehicle
 AVLB Armored Vehicle-Launched Bridge
 AVRE..... Armored Vehicle, Royal Engineers
 AWACS..... Airborne Warning and Control System
 BAT Brilliant Anti-Tank guided submunition (US)
 BB..... Base Bleed
 BD..... Base Detonation
 BETAB Russian "betonoboy'naya aviatsionaya bomba," or concrete-piercing aircraft bomb
 BZ..... Benactyzine, Chemical warfare incapacitating agent
 C² Command and Control
 CAT Combined Arms Team
 CAV Composite Armored Vehicle
 CAWS Close Assault Weapon System
 CBU..... Cluster Bomb Unit
 CCITT..... International Telegraph and Telephone Consultative Committee
 CFV Cavalry Fighting Vehicle
 CITV Commander's Independent Thermal Viewer
 CUCV Commercial Utility Cargo Vehicle
 CVCC..... Combat Vehicle Command and Control
 CVSD..... Continuously Variable Slope Delta (modulation)
 CVT Continuous Variable Time
 CW..... Continuous Wave
 DAACM Direct Airfield Attack Combined Munition
 DIS Distributed Interactive Simulation
 DMSP Defense Meteorological Satellite Program
 DP..... Dual-Purpose
 DRA..... Dead Reckoning Algorithm
 DRM Dead Reckoning Model
 DRS Data Relay Satellite
 DS..... Discarding Sabot
 DSB Double Sideband
 DSCS Defense Satellite Communication System
 DSP..... Defense Support Program
 DU Depleted Uranium
 ECM Electronic Countermeasures
 ECR Electronic Combat/Countermeasures & Reconnaissance (Tornado variant)
 EFM..... Enhanced Fighter Maneuverability
 EFVS Electronic Fighting Vehicle System
 ELINT Electronic Intelligence
 ERAM..... Extended Range Anti-armor Munition
 ERINT Extended Range Interceptor
 ERS..... European Remote sensing Satellite
 EW..... Electronic Warfare

E²I..... Endo-Exoatmospheric Interceptor
 FAASV..... Field Artillery Ammunition Support Vehicle
 FAMV Forward Area Multi-purpose Vehicle
 FAV Fast Attack Vehicle
 FDC Fire Direction Center
 FIST-V..... Fire Support Team Vehicle
 FM..... Frequency Modulation
 FMTV Family of Medium Tactical Vehicles
 FOG-M Fiber Optic Guided Missile
 FOMP Fiber Optic Mortar Projectile
 FS Fin Stabilized
 FSK..... Frequency Shift Keying
 GB..... Sarin, chemical warfare nerve agent
 GD Soman, chemical warfare nerve agent
 GLCM..... Ground Launched Cruise Missile
 GLH:H..... Ground Launched Hellfire: Heavy
 GP..... General Purpose
 GPS..... Global Positioning System; Gunner's Primary Sight
 GTI German Tank Improvement
 HARM..... High-Speed Antiradiation Missile
 HC Hexachloroethane Zinc
 HE High Explosive
 HEAT..... High Explosive Anti-Tank
 HE-I..... High Explosive-Incendiary
 HEMTT Heavy Expanded Mobility Tactical Truck
 HEP High Explosive Plastic
 HERA High Explosive Rocket Assisted
 HET Heavy Equipment Transporter
 HIMAD..... High-to-Medium Altitude Air Defense
 HL..... Mustard-Lewisite mixture, chemical warfare blister agent
 HMMWV High Mobility Multipurpose Wheeled Vehicle
 HOT..... High subsonic Optically Teleguided; French ATGM family
 HQ..... Headquarters
 HST Hypersonic Transport (German program)
 HVAP..... High Velocity Armor Piercing
 HVM..... High Velocity Missile
 ICM..... Improved Conventional Munition
 IDS Interdiction/Strike (Tornado ground-attack variant)
 IEEE..... Institute of Electrical and Electronic Engineers
 IFV..... Infantry Fighting Vehicle
 IR..... Infrared
 ISB..... Independent Sideband
 IST..... Institute for Simulation and Training
 ITOW..... Improved TOW
 ITV..... Improved TOW Vehicle
 JIEO Joint Interoperability Engineering Organization
 JSTARS Joint Surveillance & Target Attack Radar System
 KE..... Kinetic Energy
 LAV Light Armored Vehicle
 LAW..... Light Antitank Weapon
 LCM..... Landing Craft, Mechanized/Medium
 LCT..... Landing Craft, Tank
 LCU Landing Craft, Utility
 LCV Lightweight Combat Vehicle

LGB Laser-Guided Bomb
 LMTV Light Medium Tactical Vehicle
 LOSAT..... Line-of-Sight Anti-Tank
 LRRSC..... Long-Range Recovery and Support Craft
 LSB..... Lower Sideband
 LSV..... Light Strike Vehicle
 LVT..... Landing Vehicle, Tracked
 LVTC LVT, Command
 LVTE LVT, Engineer
 LVTH..... LVT, Howitzer
 LVTR LVT, Recovery
 MBT..... Main Battle Tank
 MCM..... Mine Countermeasures
 MCT..... Medium Combat Truck
 MG..... Machine Gun
 MHC Material Handling Crane
 MICLIC Mine-Clearing Charge
 MIL STD Military Standard
 MLMS..... Multipurpose Lightweight Missile System
 MLRS Multiple Launch Rocket System
 MP Multi-Purpose
 MPIM Multipurpose Individual Munition
 MPS..... Maritime Prepositioning Ship
 MRCA..... Multi-Role Combat Aircraft
 MTV..... Medium Tactical Vehicle
 NASP National Aerospace Plane
 NATO North Atlantic Treaty Organization
 NBC..... Nuclear/Biological/Chemical
 NLS National Launch System
 N/A Not Applicable
 PCM..... Pulse Code Modulation
 PD..... Point Detonation
 PDM Pursuit Deterrent Munition
 PDU..... Protocol Data Unit
 PM..... Phase Modulation
 POET..... Primed Oscillator Expendable Transporter (US RF decoy)
 PRI..... Pulse Repetition Interval
 RA..... Rocket Assisted
 RAAM..... Rifle-launcher Anti-Armor Munition
 RAG..... Ring Airfoil Grenade
 RAM Rolling Airframe Missile
 RAMP-V Rapid Multi-Purpose Vehicle
 RAP Rocket-Assisted Projectile
 RDF/LT..... Rapid Deployment Force Light Tank
 RF Radio Frequency
 RMP..... Reprogrammable Microprocessor (Stinger variant)
 RN Royal Navy
 RNXS..... Royal Naval Auxiliary Service
 RTCST..... Rough Terrain Container Straddle Truck
 RTTL Range Target Towing Launch (RAF)
 SAM..... Surface-to-Air Missile
 SAMP French "Systeme sol-Air Moyenne Portee" (Surface to Air Missile Platform, new
 SAM system under development)

SAMP French "Societe des Ateliers Mecaniques de Pont-sur-Sambre," Bomb
 Manufacturer
 SAP Semi-Armor Piercing
 SAR Search and Rescue
 SAW Squad Automatic Weapon
 SD Self-Destruct
 SDS Satellite/Space Defense System
 SFW Sensor Fused Weapon
 SEALS Sea/Air/Land (USN special forces)
 SH Squash Head
 SIGINT Signal Intelligence
 SIMNET Simulation Networking
 SINCGARS Single Channel Ground-Air Radio System
 SLAM Selectable Lightweight Attack Munition
 SLAM Standoff Land Attack Missile (modified Harpoon)
 SLBM Submarine Launched Ballistic Missile
 SMAW Shoulder-launched Multipurpose Assault Weapon (US)
 SNA Soviet Naval Air
 SP Self-Propelled
 SPAS Shuttle Pallet Satellite (German)
 SRAM Short Range Attack Missile
 SSB Single Sideband
 SSBS French "Sol-Sol Balistique Stratigique," strategic surface-to-surface ballistic
 missile
 SUBROC Submarine Rocket
 SUSV Small Unit Support Vehicle
 SURTASS Surveillance Towed Array Sonar System
 SWAARM Smart Weapon Anti-Armor (UK guided submunition)
 SWATH Small Water-plane Area Twin Hull
 -T Tracer (ammunition)
 TACAMO Take Charge And Move Out
 TAD Trailing Arm Drive
 TARG Telescoped Ammunition Revolver Gun
 TASM Tomahawk Anti-Ship Missile
 TBD To Be Determined
 TCD Landing Ship, Dock
 TDRSS Tactical Data Relay Satellite System
 THAAD Theater High-Altitude Area Defense
 TLAM Tomahawk Land Attack Missile
 TLB Trailer Launched Bridge
 TOW Tube-launched, Optically tracked, Wire-guided (missile)
 TUTT Twin Unit Tractor Tugs
 UK or U.K. United Kingdom
 US or U.S. United States
 USB Upper Sideband
 VLF Very Low Frequency
 VRRFTLT Variable Reach Rough Terrain Forklift Truck
 VSB Vestigial Sideband
 VT Variable Time
 WAM Wide Area Mine
 WP White Phosphorus

3.0 PDU header

3.1 Protocol Version

This section specifies the 8-bit enumeration for the Protocol-Version field in the PDU-Header record.

<u>Field Value</u>	<u>Protocol Version</u>
0	Other
1	DIS PDU version 1.0 (May 92)
2	IEEE 1278-1993
3	DIS PDU version 2.0 - third draft (May 93)
4	DIS PDU version 2.0 - fourth draft (revised) March 16, 1994
5	IEEE 1278.1-1995
6	IEEE 1278.1A-1998

3.2 PDU Type

This section specifies the 8-bit enumeration for the PDU-Type field in the PDU Header record.

<u>Field Value</u>	<u>PDU Type</u>
0	Other
1	Entity State
2	Fire
3	Detonation
4	Collision
5	Service Request
6	Resupply Offer
7	Resupply Received
8	Resupply Cancel
9	Repair Complete
10	Repair Response
11	Create Entity
12	Remove Entity
13	Start/Resume
14	Stop/Freeze
15	Acknowledge
16	Action Request
17	Action Response
18	Data Query
19	Set Data
20	Data
21	Event Report
22	Comment
23	Electromagnetic Emission
24	Designator
25	Transmitter
26	Signal
27	Receiver
28	IFF/ATC/NAVAIDS
29	Underwater Acoustic
30	Supplemental Emission / Entity State

31	Intercom Signal
32	Intercom Control
33	Aggregate State
34	IsGroupOf
35	Transfer Control
36	IsPartOf
37	Minefield State
38	Minefield Query
39	Minefield Data
40	Minefield Response NAK
41	Environmental Process
42	Gridded Data
43	Point Object State
44	Linear Object State
45	Areal Object State
46	TSPI
47	Appearance
48	Articulated Parts
49	LE Fire
50	LE Detonation
51	Create Entity-R
52	Remove Entity-R
53	Start/Resume-R
54	Stop/Freeze-R
55	Acknowledge-R
56	Action Request-R
57	Action Response-R
58	Data Query-R
59	Set Data-R
60	Data-R
61	Event Report-R
62	Comment-R
63	Record Query-R
64	Set Record-R
65	Comment-R
66	Collision-Elastic
67	Entity State Update
129	Announce Object
130	Delete Object
131	Describe Application
132	Describe Event
133	Describe Object
134	Request Event
135	Request Object

3.3 Protocol Family

This section specifies the 8-bit enumeration for the Protocol-Family field in the PDU-Header record.

<u>Field value</u>	<u>PDU Family</u>
0	other
1	Entity Information/Interaction
2	Warfare

3	Logistics
4	Radio Communication
5	Simulation Management
6	Distributed Emission Regeneration
7	Entity Management
8	Minefield
9	Synthetic Environment
10	Simulation Management with Reliability
11	Live Entity
12	Non-Real Time
129	Experimental - Computer Generated Forces

4.0 Entity State PDU

4.1 Force ID

This section specifies the 8-bit enumeration for the Force-ID field in the Entity-State PDU.

<u>Field Value</u>	<u>Force</u>
0	Other
1	Friendly
2	Opposing
3	Neutral

4.2 Entity Type record

This section specifies the 64-bit enumeration for the Entity-Type record of the Entity State PDU. Individual fields in this record are discussed separately in the subsections below. Entity Types are arranged in a hierarchical order such that higher-fidelity simulations may depict detailed representations of an entity (such as an F-16B) while lower-fidelity simulations may depict the same entity in a more generic manner (such as an F-16 or a Fighter Aircraft).

4.2.1 Entity Kind

This section specifies the 8-bit enumeration for the Entity-Kind field.

<u>Field Value</u>	<u>Kind</u>
0	Other
1	Platform
2	Munition
3	Life form
4	Environmental
5	Cultural feature
6	Supply
7	Radio
8	Expendable
9	Sensor/Emitter

Definitions of the remaining fields are based on this classification. Following is a detailed discussion of the remaining fields for each of these kinds.

4.2.1.1 Platform

The Platform kind refers to vehicles such as ships, tanks, aircraft and submarines. Fields used to further describe platforms are detailed in the paragraphs that follow.

4.2.1.1.1 Domain

The Domain field is an 8-bit enumeration. The defined values for a platform's domain are:

<u>Field Value</u>	<u>Domain</u>
0	Other
1	Land
2	Air
3	Surface
4	Subsurface
5	Space

4.2.1.1.2 Country

The Country field is a 16-bit enumeration representing the country to which a particular platform's design is attributed. The defined values for this field are contained in 4.2.2.

4.2.1.1.3 Category

The Category field is an 8-bit enumeration. The field values for Land, Air, Surface, Subsurface and Space domains are given below.

4.2.1.1.3.1 Land

<u>Field Value</u>	<u>Category</u>
0	Other
1	Tank
2	Armored Fighting Vehicle - (IFV, APC, SP mortars, armored cars, chemical reconnaissance, anti-tank guided missile launchers, etc.)
3	Armored Utility Vehicle - (Engineering vehicle, tracked load carriers, towing vehicles, recovery vehicles, AVLB, etc.)
4	Self-propelled Artillery - (guns and howitzers)
5	Towed Artillery - (anti-tank guns, guns and howitzers)
6	Small Wheeled Utility Vehicle - (0-1.25 tons)
7	Large Wheeled Utility Vehicle - (greater than 1.25 tons)
8	Small Tracked Utility Vehicle - (0-4999 kg weight load)
9	Large Tracked Utility Vehicle - (greater than 4999 kg weight load)
10	Mortar
11	Mine plow
12	Mine rake
13	Mine roller
14	Cargo trailer
15	Fuel trailer
16	Generator trailer
17	Water trailer
18	Engineer equipment
19	Heavy equipment transport trailer
20	Maintenance equipment trailer
21	Limber
22	Chemical decontamination trailer
23	Warning System

24	Train - Engine
25	Train - Car
26	Train - Caboose
27	Civilian Vehicle
28	Air Defense / Missile Defense Unit Equipment
29	Command, Control, Communications, and Intelligence (C3I) System
30	Operations Facility
31	Intelligence Facility
32	Surveillance Facility
33	Communications Facility
34	Command Facility
35	C4I Facility
36	Control Facility
37	Fire Control Facility
38	Missile Defense Facility
39	Field Command Post
40	Observation Post

4.2.1.1.3.2 Air

<u>Field Value</u>	<u>Category</u>
0	Other
1	Fighter/Air Defense
2	Attack/Strike
3	Bomber
4	Cargo/Tanker
5	ASW/Patrol/Observation
6	Electronic Warfare (EW)
7	Reconnaissance
8	Surveillance/C ² (Airborne Early Warning)
20	Attack Helicopter
21	Utility Helicopter
22	Antisubmarine Warfare/Patrol Helicopter
23	Cargo Helicopter
24	Observation Helicopter
25	Special Operations Helicopter
40	Trainer
50	Unmanned
57	Non-Combatant Commercial Aircraft

4.2.1.1.3.3 Surface

<u>Field Value</u>	<u>Category</u>
0	Other
1	Carrier
2	Command Ship/Cruiser
3	Guided Missile Cruiser
4	Guided Missile Destroyer (DDG)
5	Destroyer (DD)
6	Guided Missile Frigate (FFG)
7	Light/Patrol Craft

8	Mine Countermeasure Ship/Craft
9	Dock Landing Ship
10	Tank Landing Ship
11	Landing Craft
12	Light Carrier
13	Cruiser/Helicopter Carrier
14	Hydrofoil
15	Air Cushion/Surface Effect
16	Auxiliary
17	Auxiliary, Merchant Marine
18	Utility
50	Frigate (including Corvette)
51	Battleship
52	Heavy Cruiser
53	Destroyer Tender
54	Amphibious Assault Ship
55	Amphibious Cargo Ship
56	Amphibious Transport Dock
57	Ammunition Ship
58	Combat Stores Ship
59	Surveillance Towed Array Sonar System (SURTASS)
60	Fast Combat Support Ship
61	Non-Combatant Ship

4.2.1.1.3.4 Subsurface

<u>Field Value</u>	<u>Category</u>
0	Other
1	SSBN (Nuclear Ballistic Missile)
2	SSGN (Nuclear Guided Missile)
3	SSN (Nuclear Attack - Torpedo)
4	SSG (Conventional Guided Missile)
5	SS (Conventional Attack - Torpedo, Patrol)
6	SSAN (Nuclear Auxiliary)
7	SSA (Conventional Auxiliary)

4.2.1.1.3.5 Space

<u>Field Value</u>	<u>Category</u>
0	Other
1	Manned
2	Unmanned
3	Booster

4.2.1.2 Munition

The Munition kind includes entities such as missiles, ballistic rounds, bullets and torpedoes. Fields used to further describe munitions are detailed in the paragraphs that follow.

4.2.1.2.1 Domain

The Domain field is an 8-bit enumeration reflecting a munition's normal role. The defined values for a munition's domain are:

<u>Field Value</u>	<u>Domain</u>
0	Other
1	Anti-Air
2	Anti-Armor
3	Anti-Guided Weapon
4	Antiradar
5	Antisatellite
6	Antiship
7	Antisubmarine
8	Antipersonnel
9	Battlefield Support
10	Strategic
11	Tactical
12	Directed Energy (DE) Weapon

4.2.1.2.2 Country

The Country field is a 16-bit enumeration representing the country to which a particular munition's design is attributed. The defined values for this field are contained in 4.2.2.

4.2.1.2.3 Category

The Category field is an 8-bit enumeration. The field values for munitions of all domains are:

<u>Field Value</u>	<u>Category</u>
0	Other
1	Guided
2	Ballistic
3	Fixed

4.2.1.2.4 Fuse and warhead

Munitions are further identified in the Detonation PDU in terms of their fuse and warhead. The values for these fields are contained in 1.1 and 1.2 respectively.

4.2.1.3 Life Form

The Life-Form kind refers to dismounted infantry, scouts, SEALs, or other humans, as well as animals like whales and shrimp. Life forms are treated similarly to platforms since they can move and (some) can fire munitions. Fields used to further define life forms are detailed in the paragraphs that follow.

4.2.1.3.1 Domain

The Domain field is an 8-bit enumeration. The defined values for a life form's domain are identical to a platform's. See 4.2.1.1.1.

4.2.1.3.2 Country

The Country field is a 16-bit enumeration defining a life form's country of origin. The defined values for this field are found in 4.2.2.

4.2.1.3.3 Specific Life-Form definition

The remaining fields of the Entity-Type record further define all life forms. The Subcategory field specifying the number of individuals allows representation of one or more life forms using one PDU.

4.2.1.4 Environmental

The Environmental kind refers to entities in the usual *physical-object* sense, e.g. clouds and ice bergs, as well as inherent *characteristics* of a particular environment, such as sea state or transmissivity profile. Fields used to further describe environmental entities are detailed in the paragraphs that follow.

4.2.1.4.1 Domain

The Domain field is an 8-bit enumeration. The defined values for Environmental domain are identical to a platform's. See 4.2.1.1.1.

4.2.1.4.2 Country

The Country field is unused.

4.2.1.4.3 Specific Environmental definition

The remaining fields of the Entity-Type record further define all environmentals. The Subcategory field defines the size of the environmental entity.

4.2.1.5 Cultural Feature

The Cultural-Feature kind refers to engineering and natural effects such as craters, bridges, vehicle tracks, etc. Fields used to further describe cultural features are detailed in the paragraphs that follow.

4.2.1.5.1 Domain

The Domain field is an 8-bit enumeration. The defined values for a cultural feature's domain are identical to a platform's. See 4.2.1.1.1.

4.2.1.5.2 Country

The Country field is unused.

4.2.1.5.3 Specific Cultural-Feature definition

The remaining fields of the Entity-Type record further define all cultural features.

4.2.1.6 Supply

The Supply kind refers to supplies other than munitions, such as fuel, food and personnel. Fields used to further describe supplies are detailed in the paragraphs that follow.

4.2.1.6.1 Domain

The Domain field is unused.

4.2.1.6.2 Country

The Country field is unused.

4.2.1.6.3 Specific Supply definition

The remaining fields of the Entity-Type record further define all supplies.

4.2.1.7 Radio

The Radio kind refers to electronic devices for the communication of both audio and data. Fields used to further describe radios are detailed in the paragraphs that follow.

4.2.1.7.1 Domain

TBD.

4.2.1.7.2 Country

TBD.

4.2.1.7.3 Specific Radio Definition

4.2.1.8 Expendable

The Expendable kind refers to countermeasures devices that are dispensed from another entity. The devices may be active emitters or passive reflectors of energy. Fields used to further describe expendable entities are detailed in the paragraphs which follow.

4.2.1.8.1 Domain

The Domain field is an 8-bit enumeration. The defined values for an expendable's domain are identical to a platform's. See 4.2.1.1.1.

4.2.1.8.2 Country

The Country field is a 16-bit enumeration defining the expendable's country of origin. The defined values for this field are found in 4.2.2.

4.2.1.8.3 Category

The Category field is an 8-bit enumeration. The field values for expendables for Air, Surface, and Subsurface domains are given below.

4.2.1.8.3.1 Air

<u>Field Value</u>	<u>Category</u>
0	Other
1	Chaff
2	Flare
3	Combined chaff and flare
4	Active emitter
5	Passive decoy

4.2.1.8.3.2 Surface

<u>Field Value</u>	<u>Category</u>
0	Other
2	Flare
4	Active emitter
5	Passive decoy

4.2.1.8.3.3 Subsurface

<u>Field Value</u>	<u>Category</u>
0	Other
4	Active emitter
5	Passive decoy

4.2.1.9 Sensor/Emitter

The Sensor/Emitter kind refers to sensors and emitters, such as stand-alone radars, jammers, and detection systems, that are not part of another platform or system described by another Entity Kind. Fields used to further describe sensors/emitters are detailed in the paragraphs that follow.

4.2.1.9.1 Domain

The Domain field is an 8-bit enumeration. The defined values for a sensor/emitter's domain are identical to a platform's. See 4.2.1.1.1.

4.2.1.9.2 Country

The Country field is a 16-bit enumeration defining a sensor/emitter's country of origin. The defined values for this field are found in 4.2.2.

4.2.1.9.3 Category

The Category field is an 8-bit enumeration. The defined values for this field for all domains are:

<u>Field Value</u>	<u>Category</u>
0	Other
1	Multi-spectral
2	RF Active
3	RF Passive (intercept and DF)
4	Optical (direct viewing with or without optics)
5	Electro-Optical

6	Seismic
7	Chemical, point detector
8	Chemical, standoff
9	Thermal (temperature sensing)
10	Acoustic, Active
11	Acoustic, Passive
12	Contact/Pressure (physical, hydrostatic, barometric)
13	Electro-Magnetic Radiation (gamma radiation)
14	Particle Radiation (Neutrons, alpha, beta particles)
15	Magnetic
16	Gravitational

4.2.2 Country

This section specifies the 16-bit enumeration for the Country field.

<u>Field Value</u>	<u>Country</u>
0	Other
1	Afghanistan
2	Albania
3	Algeria
4	American Samoa (United States)
5	Andorra
6	Angola
7	Anguilla
8	Antarctica (International)
9	Antigua and Barbuda
10	Argentina
244	Armenia
11	Aruba
12	Ashmore and Cartier Islands (Australia)
13	Australia
14	Austria
245	Azerbaijan
15	Bahamas
16	Bahrain
17	Baker Island (United States)
18	Bangladesh
19	Barbados
20	Bassas da India (France)
246	Belarus
21	Belgium
22	Belize
23	Benin (aka Dahomey)
24	Bermuda (United Kingdom)
25	Bhutan
26	Bolivia
247	Bosnia and Hercegovina
27	Botswana
28	Bouvet Island (Norway)
29	Brazil
30	British Indian Ocean Territory (United Kingdom)

31	British Virgin Islands (United Kingdom)
32	Brunei
33	Bulgaria
34	Burkina (aka Burkina Faso or Upper Volta)
35	Burma (Myanmar)
36	Burundi
37	Cambodia (aka Kampuchea)
38	Cameroon
39	Canada
40	Cape Verde, Republic of
41	Cayman Islands (United Kingdom)
42	Central African Republic
43	Chad
44	Chile
45	China, People's Republic of
46	Christmas Island (Australia)
248	Clipperton Island (France)
47	Cocos (Keeling) Islands (Australia)
48	Colombia
222	Commonwealth of Independent States
49	Comoros
50	Congo, Republic of
51	Cook Islands (New Zealand)
52	Coral Sea Islands (Australia)
53	Costa Rica
107	(Cote D'Ivoire (aka Ivory Coast))
249	Croatia
54	Cuba
55	Cyprus
56	Czechoslovakia (separating into Czech Republic and Slovak Republic)
23	Dahomey (aka Benin)
57	Denmark
58	Djibouti
59	Dominica
60	Dominican Republic
61	Ecuador
62	Egypt
63	El Salvador
64	Equatorial Guinea
250	Estonia
65	Ethiopia
66	Europa Island (France)
67	Falkland Islands (aka Islas Malvinas) (United Kingdom)
68	Faroe Islands (Denmark)
69	Fiji
70	Finland
71	France
72	French Guiana (France)
73	French Polynesia (France)
74	French Southern and Antarctic Islands (France)
75	Gabon
76	Gambia, The
77	Gaza Strip (Israel)
251	Georgia

78	Germany
79	Ghana
80	Gibraltar (United Kingdom)
81	Glorioso Islands (France)
82	Greece
83	Greenland (Denmark)
84	Grenada
85	Guadeloupe (France)
86	Guam (United States)
87	Guatemala
88	Guernsey (United Kingdom)
89	Guinea
90	Guinea- Bissau
91	Guyana
92	Haiti
93	Heard Island and McDonald Islands (Australia)
94	Honduras
95	Hong Kong (United Kingdom)
96	Howland Island (United States)
97	Hungary
98	Iceland
99	India
100	Indonesia
101	Iran
102	Iraq
104	Ireland
105	Israel
106	Italy
107	Ivory Coast (aka Cote D'Ivoire)
108	Jamaica
109	Jan Mayen (Norway)
110	Japan
111	Jarvis Island (United States)
112	Jersey (United Kingdom)
113	Johnston Atoll (United States)
114	Jordan
115	Juan de Nova Island
252	Kazakhstan
116	Kenya
117	Kingman Reef (United States)
118	Kiribati
119	Korea, Democratic People's Republic of (North)
120	Korea, Republic of (South)
121	Kuwait
253	Kyrgyzstan
122	Laos
254	Latvia
123	Lebanon
124	Lesotho
125	Liberia
126	Libya
127	Liechtenstein
255	Lithuania
128	Luxembourg

130	Macau (Portugal)
256	Macedonia
129	Madagascar
131	Malawi
132	Malaysia
133	Maldives
134	Mali
135	Malta
136	Man, Isle of (United Kingdom)
137	Marshall Islands
138	Martinique (France)
139	Mauritania
140	Mauritius
141	Mayotte (France)
142	Mexico
143	Micronesia, Federative States of
257	Midway Islands (United States)
258	Moldova
144	Monaco
145	Mongolia
259	Montenegro
146	Montserrat (United Kingdom)
147	Morocco
148	Mozambique
35	Myanmar (aka Burma)
149	Namibia (South West Africa)
150	Nauru
151	Navassa Island (United States)
152	Nepal
153	Netherlands
154	Netherlands Antilles (Curacao, Bonaire, Saba, Sint Maarten Sint Eustatius)
155	New Caledonia (France)
156	New Zealand
157	Nicaragua
158	Niger
159	Nigeria
160	Niue (New Zealand)
161	Norfolk Island (Australia)
162	Northern Mariana Islands (United States)
163	Norway
164	Oman
216	Pacific Islands, Trust Territory of the (Palau)
165	Pakistan
166	Palmyra Atoll (United States)
168	Panama
169	Papua New Guinea
170	Paracel Islands (International - Occupied by China, also claimed by Taiwan and Vietnam)
171	Paraguay
172	Peru
173	Philippines
174	Pitcairn Islands (United Kingdom)
175	Poland

176	Portugal
177	Puerto Rico (United States)
178	Qatar
179	Reunion (France)
180	Romania
260	Russia
181	Rwanda
183	St. Helena (United Kingdom)
184	St. Lucia
186	St. Vincent and the Grenadines
182	St. Kitts and Nevis
185	St. Pierre and Miquelon (France)
187	San Marino
188	Sao Tome and Principe
189	Saudi Arabia
190	Senegal
261	Serbia and Montenegro (Montenegro to separate)
191	Seychelles
192	Sierra Leone
193	Singapore
262	Slovenia
194	Solomon Islands
195	Somalia
197	South Africa
196	South Georgia and the South Sandwich Islands (United Kingdom)
198	Spain
199	Spratly Islands (International - parts occupied and claimed by China, Malaysia, Philippines, Taiwan, Vietnam)
200	Sri Lanka
201	Sudan
202	Suriname
203	Svalbard (Norway)
204	Swaziland
205	Sweden
206	Switzerland
207	Syria
208	Taiwan
263	Tajikistan
209	Tanzania
210	Thailand
211	Togo
212	Tokelau (New Zealand)
213	Tonga
214	Trinidad and Tobago
215	Tromelin Island (France)
217	Tunisia
218	Turkey
264	Turkmenistan
219	Turks and Caicos Islands (United Kingdom)
220	Tuvalu
221	Uganda
265	Ukraine
223	United Arab Emirates

224	United Kingdom
225	United States
34	Upper Volta (aka Burkina or Burkina Faso)
226	Uruguay
266	Uzbekistan
227	Vanuatu
228	Vatican City (Holy See)
229	Venezuela
230	Vietnam
231	Virgin Islands (United States)
232	Wake Island (United States)
233	Wallis and Futuna (France)
235	West Bank (Israel)
234	Western Sahara
236	Western Samoa
237	Yemen
240	Yugoslavia
241	Zaire
242	Zambia
243	Zimbabwe

4.2.3 Comprehensive Entity-Type tables

The following tables list the correct field values of the Entity-Type record for many specific entities in a typical DIS exercise. The header on each page contains the Kind-, Domain-, and Country-field values for all entities on that page, as specified in 4.2.1. The remaining field values (Category, Subcategory, Specific) are nested in numerical order (with occasional exceptions due to correction or update) with specific definitions appropriate to the entity's kind, domain, and country. The value of zero used in a category, subcategory, or specific field in this enumerations in this section and associated subsections shall mean "other" in all cases whether explicitly stated or not. Any unused field shall be 0-filled.

4.2.3.1 Platforms

4.2.3.1.1 U.S. Platforms

All U.S. platforms have a Kind-field value of 1 and a Country-field value of 225.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225	0	Other	
			1	Miscellaneous guns	
			1	M901 40-mm machine gun	
			3	Liquid propellant guns	
			4	Phalanx (Close-In Weapons Systems (CIWS) Mk15)	
			2	Grenade launchers	
			1	Mk 19 40-mm	
			2	Brunswick Multisalvo Smoke Grenade Launcher	
			3	Tracor Aerospace Advanced Smoke Launcher System	
			3	Other missile systems	
			1	McDonnell-Douglas Harpoon Coastal Defense System	
			4	Bridges	
			1	Trailer Launched Bridge (TLB)	
			2	Mobile assault bridge	
			3	M60 bridge	
			5	Command Post	
			1	Tank	
			1	M1 Abrams	
			1	M1 Abrams	
			2	M1A1 Abrams	
			3	M1A2	
			4	M1A1 w/ mine rollers	
			5	M1A1 w/ mine plows	
			6	M1A1 w/ DU armor	
			7	M1A2 w/ Combat Vehicle Command and Control (CVCC)	
			2	M60 Main Battle Tank (MBT)	
			1	M60A3	
			2	M60A1	
			4	M60A1 with ERA	
			3	M551 Sheridan light tank/reconnaissance vehicle	
			1	M551A1	
			4	M48 medium tank	
			1	M48C	
			2	M48A1	
			3	M48A2	
			4	M48A2C	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
					5 M48A3
					6 M48A4
					7 M48A5
					8 M48H
					9 M48 AVLB
					10 M48 ARV
					11 M48 mine clearing vehicle
					12 M48A2GA2
					13 M48A5E
					5 M47 medium tank
					1 M47
					2 M47M
					3 GLS M47 ARV
					6 M41 light tank
					1 M41C
					2 M41E W/8V-71T Engine
					3 QM41
					4 M41B
					6 M41 German Tank Improvement (GTI)
					7 Cadillac Gage Commando Stingray light tank
					8 FMC Close Combat Vehicle Light VFM 5 tank
					9 AAI Rapid Deployment Force Light Tank (RDF/LT) Combined Arms Team/Lightweight Combat Vehicle (CAT/LCV)
					1 Prototype
					10 Teledyne Continental Armored Gun System
					2 Armored fighting vehicle
					1 FMC M2/M3 Bradley
					1 M2A2 Bradley Infantry Fighting Vehicle (IFV)
					2 M3A2 Bradley Cavalry Fighting Vehicle (CFV)
					3 FMC Bradley IFV
					4 M2 Bradley IFV
					5 M2A1 Bradley IFV
					6 M3 Bradley CFV
					7 M3A1 Bradley CFV
					3 FMC M113 Armored Personnel Carrier (APC)
					1 M113A2
					2 M113A3
					3 M113A3 w/ M105 trailer
					6 M113A1 Improved TOW Vehicle (ITV)
					7 M113A1 TOW
					8 M113A2 ITV
					9 M113A2 TOW

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
					10 M730 Chaparral Surface-to-Air Missile (SAM) launcher
					11 M113
					12 M113A1
					13 M113A1R
					14 M113A2DR
					15 M113A2H
					16 M113A2IT
					17 M113A2MK
					18 M113A2R
					19 M132/M132A1 Flamethrower
					20 M667
					23 M741
					24 M741A1
					25 M741A2
					26 RTL
					27 XM474
					28 XM474E2
					29 XM667E1
					30 XM727
					32 XM741
					33 XM806E1
					34 XM806E2

5 Light Armored Vehicle (LAV) TOW

6 FMC Armored IFV

- 1 YPR 765 PRI
- 2 YPR 765 PRCO-B command vehicle
- 3 YPR 765 PRCO-C1 to C5
- 4 YPR 765 PRRDR radar vehicle
- 5 YPR 765 PRRDR-C radar/command vehicle
- 6 YPR 765 PRGWT ambulance
- 7 YPR 765 PRI/I
- 8 YPR 765 PRMR mortar tractor
- 9 YPR 765 PRVR-A cargo vehicle
- 10 YPR 765 PRVR-B cargo vehicle
- 11 YPR 765 PRAT

7 FMC Lynx (or M113) Command and Reconnaissance Vehicle

8 M981 FIST-V

9 M106 mortar carrier

- 1 M106 107-mm
- 2 M106A1 107-mm
- 3 M106A2 107-mm
- 4 M1064 120-mm

10 Electronics & Space Corp M901 ITV

- 1 M901
- 2 M901A1

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
				11	M125 81-mm mortar carrier
					1 M125A1
					2 M125A2
				12	Cadillac Gage V-600 Armored Car
				13	Cadillac Gage LAV Assault Gun LAV-105
				15	LAV-105
				16	Chrysler MAC-1 armored car
				17	Cadillac Gage Commando Scout
				18	Cadillac Gage Commando V-300
					1 V-300 w/ TOW
					2 V-300 w/ 81-mm mortar
					3 V-300 ambulance
				19	Cadillac Gage Commando V-150
					1 Commando w/ MG turret
					2 Commando w/ 1-m MG turret
					3 Commando w/ 1-m 20-mm turret
					4 Commando w/ 20-mm turret
					5 Commando w/ 25-mm turret
					6 Commando w/ 40-mm/12.7-mm turret
					7 Commando V-150 S
					8 Commando air defense vehicle
					9 Commando with 76-mm turret-mounted gun
					10 Commando with 90-mm turret-mounted gun
					11 Commando with 81-mm mortar
					12 Commando with TOW
					13 Commando command vehicle
					14 Base security vehicle
					15 Malaysian upgraded V-150 Commando
				20	AV Technology Corporation Dragoon
					1 APC
					2 ASV-XC extended cab
					3 Dragoon Armored Command Vehicle (ACV)
					4 Dragoon Armored Mortar Carrier (AMC)
					5 Dragoon TOW Carrier
				21	Half-track APCs
				22	Cadillac Gage Commando Ranger APC
				23	Vehicle Sys Development Corp Lancer Armored Patrol Vehicle (APV)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
				24	AAI Propulsion System Demonstrator Amphibious Assault Vehicle (AAV)
				25	Advanced AAV
				26	FMC AAV7A1 (LVTP7A1)
				1	AAVC7A1 command vehicle
				2	AAVR7A1 recovery vehicle
				3	AAV7A1 with mine plow
				4	AAV7A1 with VEMASID
				5	AAV7A1 with mine-clearance-system kit
				6	AAV7A1 with upgunned weapons station
				27	LVTP5A1 Armored AAV
				1	LVTC5 (Command, Model 5)
				2	LVTE1 (Engineer, Model 1)
				3	LVTH6 (Howitzer, Model 6)
				4	LVTR1 (Recovery, Model 1)
				28	Composite Armored Vehicle (CAV)
				30	M93 Armored Reconnaissance Vehicle
			3		Armored utility vehicle
				1	M88 medium recovery vehicle
				1	M88A1
				2	M88A2
				3	M88A1E1
				2	M578 light armored recovery vehicle
				4	AVLB
				1	M1 AVLB bridge layer
				2	M60 AVLB
				3	M48 AVLB
				4	M60 AVLB w/o bridge
				5	M728 combat engineer vehicle
				6	M9 armored combat earthmover
				7	Cadillac Gage Commando V-150 Recovery Vehicle
				8	AV Technology Corporation Dragoon
				1	Armored Logistics Support Vehicle (ALSV)
				10	M113/M113A1/M113A2 bulldozer
				11	M577/M577A1/M577A2 command post
				12	Stretched M577A2E2 command post

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
				13	XM1068 command post vehicle
				14	FMC (M113) APC ambulance
				15	M113A2 recovery vehicle
				16	Abrams Recovery Vehicle
				18	Fitter's vehicle
				19	Armored Maintenance Vehicle (AMV)
				20	M1059 smoke-generating system
			4		Self-propelled artillery
				1	M270 Multiple Launch Rocket System (MLRS)
				2	M110 203-mm (8-inch) SP Howitzer
				1	M110
				2	M110A2
				3	M109 155-mm SP Howitzer
				1	M109
				2	M109A1
				3	M109A2
				4	M109A3
				5	M109A4
				6	M109A5
				7	M109A6
				8	M109L
				4	(deleted)
				6	M107-175 mm gun
				9	Advanced Field Artillery System (AFAS)
				10	Liquid-propellant Artillery System
				17	Fiber Optic Guided Missile (FOG-M)
				21	Electronic & Space Corp Ground-Launched Hellfire: Heavy (GLH:H)
				22	Line-of-Sight Anti-Tank (LOSAT)
			5		Towed artillery
				1	M114 155-mm Howitzer

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
				2	M198 155-mm towed Howitzer
				3	M101 105-mm Howitzer
				1	M101
				2	M101A1
				4	M119 105-mm light Howitzer
				5	M115 8-inch Howitzer
				6	155-mm Lightweight Howitzer (LW155)
				7	M59 155-mm gun
				8	M102 105-mm Howitzer
				15	M993 70-mm Rapid Deployment Multiple Launch Rocket System (MLRS)
			6		Small wheeled utility vehicle
				1	LTV HMMWV M998-series multipurpose wheeled vehicles
				1	M998 cargo/troop carrier without winch
				2	M1038 cargo/troop carrier with winch
				3	M966 TOW missile carrier, basic armor, without winch
				4	M1036 TOW missile carrier, basic armor, with winch
				5	M1045 TOW missile carrier, supplemental armor, without winch
				6	M1046 TOW missile carrier, supplemental armor, with winch
				7	M1025 armament carrier, basic armor, without winch
				8	M1026 armament carrier, basic armor, with winch
				9	M1043 armament carrier, supplemental armor, without winch
				10	M1044 armament carrier, supplemental armor, with winch
				11	M996 mini-ambulance, 2-litter, basic armor
				12	M997 maxi-ambulance, 4-litter, basic armor
				13	M1035 soft-top ambulance, 2-litter
				14	M1037 S-250 shelter carrier, without winch
				15	M1042 S-250 shelter carrier, with winch
				16	M1069 tractor for M119 105-mm light gun
				2	Warrior NMC-40 Long-range Fast Attack Vehicle (FAV)
				3	Chenoweth FAV/Light Strike Vehicle (LSV)
				4	M58/M59 Mine-clearing charge (MICLIC) (towed)
				1	M58A3 w/rocket
				2	M58A4
				3	M59
				4	M58A3 w/o rocket

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			

- 5 Teledyne 4x4 725-kg light forces vehicle
 - 6 TPC 4x4 909-kg Rapid Multi-purpose Vehicle (RAMP-V)
 - 7 M151 4x4 362-kg light vehicle and variants
 - 8 Jeep 4x4 light vehicle
 - 9 Jeep XJ 4x4 light truck/wagon series
 - 10 M38-series 4x4 363-kg light vehicle (CJ-3A)
 - 11 Cargo truck and variants: 4x4, 680-kg
 - 1 M37
 - 2 M42
 - 3 M43
 - 4 M201
 - 12 Stewart & Stevenson Services Inc. SS-200 6x6 multi-purpose light vehicle
 - 13 Commercial Utility Cargo Vehicle (CUCV)
 - 14 M1008, truck, cargo, tactical 1-1/4 ton, 4x4
 - 15 M1009, truck, utility, tactical 3/4 ton, 4x4
 - 16 M1010, truck, ambulance, tactical 1-1/4 ton, 4x4
 - 17 M1031, truck, chassis, tactical 1-1/4 ton, 4x4
 - 18 M1028, truck, cargo, shelter carrier, tactical 1-1/4
 - 19 M715 4x4 1-1/4 ton truck, AM715-series 4x4 1-1/4 ton cargo trucks
 - 20 Jeep AM 720 4x4 1135-kg light truck
 - 21 M880 4x4 1133 kg
 - 22 M890 4x2 1133 kg
- 7 Large wheeled utility vehicle
- 1 M35/M44A2 6x6 2-1/2 ton cargo truck series
 - 1 M34: cargo truck with an unladen weight of 5332 kg, chassis designated M44
 - 2 M47: dump truck with an unladen weight of 6100 kg, chassis designated M57
 - 3 Truck, maintenance: earth-boring machine and pole setter V18A/MTQ, chassis M44

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			<ul style="list-style-type: none"> 4 Truck, maintenance: telephone construction and maintenance V17A/MTQ, chassis M44. 5 M35 truck: basic M45 chassis 6 M35A2 7 M35A2C 8 M36 9 M36A2 10 M48: tractor truck 11 M49: fuel tanker 12 M49A2C
					2 M816, truck, wrecker, 5-ton, 6x6
					3 M819, tractor, wrecker, 5-ton, 6x6
					4 M817 engineer dump truck
					5 M939 6X6 5-ton cargo truck
					7 M543, truck, wrecker: medium, 5-ton, 6x6
					8 M915 series of 5-ton trucks <ul style="list-style-type: none"> 1 Cargo 2 w/ FS pods 3 w/ shelter 4 M915, tractor, truck, 14-ton, 6x4 5 M915A1, tractor, truck, 14-ton, 6x4
					9 LTV Hummer cab-over 4x4 2268-kg cargo truck
					10 Freightliner All-Terrain Tow Vehicle (ATTV)
					11 Stewart & Stevenson SS-300 8x8 2268-kg All-Terrain Vehicle
					12 Stewart & Stevenson Family of Medium Tactical Vehicles (FMTV) <ul style="list-style-type: none"> 1 M1078 Truck, Cargo; LMTV w/ Equip 2 M1078 Truck, Cargo; LMTV w/ Equip, w/ Winch 3 M1079 Truck, Van; LMTV w/ Equip 4 M1079 Truck, Van; LMTV w/ Equip, w/ Winch 5 M1080 Truck, Chassis; LMTV w/ Equip 6 M1081 Truck, Cargo; LMTV, LAPES/AD, w/ Equip 7 M1082 Trailer; LMTV 8 M1083 Truck, Cargo; MTV w/ Equip 9 M1083 Truck, Cargo; MTV w/ Equip, w/ winch 10 M1084 Truck, Cargo; w/ MHE w/ Equip 11 M1085 Truck, Cargo; MTV, LWB, w/ Equip 12 M1085 Truck, Cargo; MTV, LWB, w/ Equip, w/ Winch 13 M1086 Truck, Cargo; MTV, LWB, w/MHE, w/ Equip 14 M1087 Truck, Van; MTV, Expansible 15 M1088 Truck, Tractor; MTV, w/ Equip 16 M1088 Truck, Tractor; MTV, w/ Equip, w/ Winch

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			<ul style="list-style-type: none"> 17 M1089 Truck, Wrecker; MTV, w/ Equip, w/ Winch 18 M1090 Truck, Dump; MTV w/ Equip 19 M1090 Truck, Dump; MTV w/ Equip, w/ Winch 20 M1091 Truck, Tanker; MTV w/ Equip, w/ Winch 21 M1092 Truck, Chassis; MTV w/ Equip 22 M1093 Truck, Cargo; MTV, LAPES/AD, w/ Equip 23 M1094 Truck, Dump; MTV, LAPES/AD, w/ Equip, w/ Winch 24 M1094 Truck, Dump; MTV, LAPES/AD, w/ Equip 25 M1095 Trailer, MTV 26 M1096 Truck, Chassis; MTV, LWB, w/ Equip 27 M1083 Truck, Cargo; MTV, w/ Equip, w/ Volcano
				13	TTC FMTV <ul style="list-style-type: none"> 1 LMTV 2 MTV
				14	M54 6x6 5-ton cargo truck series <ul style="list-style-type: none"> 1 M41, cargo 2 M41, dump6 3 M52 , tractor 4 M54, cargo, 5 M55, cargo 6 M62k, wrecker, medium 7 M64, cargo, van 8 M246, tractor, wrecker 9 M291, van, expansible 10 M328, stake, bridging 11 M543, wrecker, medium 12 M748, bolster 13 M139 chassis
				15	M809 6x6 5-ton cargo truck series <ul style="list-style-type: none"> 1 M809 2 M810 3 M811/M812
				16	M813 cargo truck, 5-ton, 6x6
				17	Standard Trailing Arm Drive (TAD) vehicle series <ul style="list-style-type: none"> 1 Modular wheeled carrier 2 Forward Area Multi-purpose Vehicle (FAMV) 3 Medium Combat Truck (MCT)
				18	Oshkosh MK48-series articulated 8x8 vehicle <ul style="list-style-type: none"> 1 MK48/14: logistics platform truck 2 MK48/15: recovery vehicle 3 MK48/16: truck tractor 4 MK48/17: cargo truck with Material Handling Crane (MHC) 5 MK48/18: load handling system vehicle.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
				19	Oshkosh Heavy Expanded Mobility Tactical Truck (HEMTT) 8x8 9979-kg
					1 M977 cargo
					2 M978 fuel-servicing
					3 M983 tractor
					4 M984A1 wrecker
					5 M985 cargo
					6 M977 w/ Mine Plow
					7 M977 w/ Mine Roller
					8 M985 w/ Mine Roller
					9 M985 w/ Mine Plow
				20	Mack RM6866SX 6x6 10000-kg truck
				21	M1070 8x8 Heavy Equipment Transporter (HET)
				22	M911 8x6 truck tractor
				23	M746 8x8 22-1/2 ton tractor truck (HET)
				24	Mack RD8226SX 52000-kg 6x6 tank transporter
				25	Navistar International Corporation F5070 6x4 tank transporter
				26	LARC-5 4x4 4545-kg amphibious cargo carrier
				27	Variable Reach Rough Terrain Forklift Truck (VRRTFLT)
				28	Rough Terrain Container Straddle Truck (RTCST)
				29	Truck, tractor, yard type, 4x2
					1 M878
					2 M878A1
				30	Case MC2500 30-ton rough terrain crane
				31	Crane, truck-mounted, hydraulic, 25-ton (CCE) (Grove TMS 300-5)
				32	Rough terrain crane 4x4 5-ton Hanson H-446A
				33	Wreckers, 2-1/2 ton 6x6
					1 M60
					2 M108
				34	M62, truck, wrecker, medium, 5-ton, 6x6
				35	M246, truck, tractor, wrecker, 5-ton, 6x6
				8	Small tracked utility vehicle

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			

9 Large tracked utility vehicle

1 M548 tracked cargo carrier

- 1 M1015
- 2 Stretched M548A1E1
- 3 M667
- 5 Recovery vehicles
- 7 Radar vehicles
- 8 M45
- 9 M548A1
- 10 M548GA1
- 11 M548/S
- 12 LAR 160

3 M992 Field Artillery Ammunition Support Vehicle (FAASV)

- 1 M993 MLRS carrier
- 2 XM987 cargo carrier
- 3 Armored, Forward-Area, Rearm Vehicle (AFARV)
- 4 Armored Maintenance Vehicle
- 5 XM1070 Electronic Fighting Vehicle System (EFVS)
- 6 Command-post vehicle

4 M973 Small Unit Support Vehicle (SUSV)

5 LMC 1500 Over-snow vehicle

6 Caterpillar 988 50,000-lb (22,680-kg) rough terrain container handler

10 Mortar

1 M29 81-mm

2 M224 60-mm light company mortar

3 M1 81-mm

4 M2 60-mm

5 M19 60-mm

6 M29A1 81-mm

7 M30 107-mm rifled

8 M252 81-mm

11 Mine plow

12 Mine rake

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225	13		Mine roller
			14		Cargo trailer
				1	0 - 0.5 ton
				2	0.51 - 2 ton
				3	2.01 - 5 ton
				4	5.02 - 10 ton
				5	greater than 10 tons
			15		Fuel trailer
				1	1-1000 gallons
				2	1001 - 5000 gallons
				3	greater than 5000 gallons
			16		Generator trailer
				1	0 - 100 kW
				2	greater than 100 KW
			17		Water trailer
				1	1-1000 gallons
				2	1001- 5000 gallons
				3	greater than 5000 gallons
			18		Engineer equipment
				1	Mine clearing line charge
				2	Dozer blade kit
				3	Lane marking system
			19		Heavy equipment transport trailer
			20		Maintenance equipment trailer
				1	Welding trailer
				2	Compressor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			3 Tools/parts trailer
					21 Limber
					22 Chemical decontamination trailer
					23 Warning System
					1 JTAGS
					2 SHIELD/ALERT
					28 Air Defense / Missile Defense Unit Equipment
					1 MIM-23 Raytheon HAWK Low-to-Medium Altitude SAM System
					1 Battalion
					1 HAWK BN/ADCP
					2 Battery
					1 HAWK Battery Command Post (BCP)
					2 HAWK CWAR (Continuous Wave Acquisition Radar) AN/MPQ-55
					3 HAWK HPI (High-Power Illuminator) AN/MPQ-46
					4 HAWK Launcher
					5 HAWK PAR (Pulse Acquisition Radar) AN/MQP-50
					6 HAWK ROR (Range-Only-Radar) AN/MPQ-51
					7 HAWK PCP (Platoon Command Post)
					2 MIM-104 Raytheon Patriot High-to-Medium Altitude Air Defense (HIMAD) System
					1 Patriot Command Center
					1 Patriot ICC (Information Coordination Central)
					2 Patriot BTOC
					2 Patriot Battery
					1 Patriot ECS (Engagement Control Station) AN/MSQ-104
					2 Patriot LS (Launcher Station)
					3 Patriot Radar AN/MPQ-53
					3 MIM-14B Nike-Hercules SAM System
					4 Theater High Altitude Area Defense (THAAD) System
					1 THAAD Battery TOC
					2 THAAD ground-based radar (GBR)
					3 THAAD Launcher
					5 Self -Propelled VSHORAD Gun / Missile System
					1 M163 Vulcan SP Anti-Aircraft Gun
					2 M42 Twin-40mm SP Anti-Aircraft Gun
					3 General Electric Vulcan-Commando 20 mm SP Air Defense (AD) System

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
					4 Boeing Avenger Pedestal-Mounted Stinger SP Air Defense (AD) System
					5 Raytheon / Loral Aeronutronic Saber Air Defense (AD) System
					6 LTV Crossbow pedestal-mounted weapon system
					7 Loral Aeronutronic 48 Chaparral
				1	M48
				2	M48A1
				3	M48A2
				4	M48A3
					8 Block VII Low-Altitude SAM System
					9 Loral Aeronutronic SAM System
					6 Towed VSHORAD Gun / Missile System
					1 M1 40mm Automatic Anti-Aircraft Gun
					2 M167 20mm Vulcan Anti-Aircraft Gun
					3 M55 Quad 12.7mm Anti-Aircraft MG

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
			29		Command, Control, Communications, and Intelligence (C3I) System
				1	Control and Reporting Center / Modular Control Equipment (CRC / MCE)
				2	Control and Reporting Element (CRE)
				3	Control and Reporting Post (CRP)
				4	USMC Tactical Air Operation Center (TAOC)
				5	AN/TSQ-73 Missile Minder
				6	JSTARS Ground Station Module (GSM) AN/TSQ-178
			30		Operations Facility
			31		Intelligence Facility
			32		Surveillance Facility
			33		Communications Facility
			34		Command Facility
			35		C4I Facility
			36		Control Facility
			37		Fire Control Facility
			38		Missile Defense Facility
			39		Field Command Post
			40		Observation Post

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
			1		Fighter/Air Defense
			2		Grumman F-14 Tomcat
				1	F-14A
				2	F-14D
			3		General Dynamics F-16 Fighting Falcon
				1	F-16A
				2	F-16B
				3	F-16C
				4	F-16D
				5	F-16E
				6	F-16N
				7	F-16 (ADF)
				8	F-16 RECCE
				9	F/A-16
				10	F-16CJ (dedicated SEAD)
			4		McDonnell-Douglas F-4 Phantom II
				2	F-4B
				3	F-4C
				4	F-4D
				5	F-4E
				6	F-4F
				7	F-4J
				10	F-4N
				11	F-4S
			5		McDonnell-Douglas F-15 Eagle
				1	F-15A
				2	F-15B
				3	F-15C
				4	F-15D
				5	F-15E
				6	F-15F
				7	F-15H
			6		Lockheed F-22 Superstar
				1	F-22A
				2	F-22B
			7		Lockheed F-104 Starfighter
			9		McDonnell-Douglas F/A-18 Hornet
				1	F/A-18A
				2	F/A-18B
				3	F/A-18C
				4	F/A-18D
				5	AF-18A
				6	ATF-18A
				7	CF-188A/B
				8	C.15

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
				9	CE.15
				10	F/A-18E/F
				10	Northrop F-5 Freedom Fighter/Tiger II
				1	F-5A
				2	F-5B
				3	F-5E Tiger II
				4	F-5F
				5	RF-5A
				6	RF-5E Tigereye
				7	RF-5F
				11	Vought Crusader F-8
				1	Crusader (Vought F-8E (FN))
				12	Joint Strike Fighter (JSF)
				1	JSF CTOL (Air Force Variant)
				2	JSF CV (Navy Variant)
				3	JSF ASTOVL (USMC/RAF Variant)
			2		Attack/Strike
				1	McDonnell-Douglas A-4 Skyhawk
				2	A-6 Intruder
				1	A-6A
				2	A-6B
				3	A-6C
				4	A-6E
				3	Vought A-7 Corsair II
				1	A-7D
				4	Fairchild Republic A-10 Thunderbolt II
				1	A-10A
				2	OA-10A
				5	Cessna 318E Dragonfly
				1	A-37
				8	McDonnell-Douglas AV-8B Harrier II
				1	AV-8B
				2	TAV-8B
				3	Harrier GR. Mk 5
				4	Harrier GR. Mk 5A
				5	Harrier GR. Mk 7
				6	Harrier T. Mk 10
				7	VA.2 Matador II
				9	Rockwell (Lockheed) AC-130U Spectre

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
				10	McDonnell-Douglas F-4 Phantom II
				1	F-4G Wild Weasel
				11	Lockheed F-117A
				12	General Dynamics F-111
				1	F-111E
				2	F-111F
				3	F-111C
			3		Bomber
				1	Rockwell International B-1
				1	B-1B
				2	Northrop B-2
				3	Boeing B-52 Stratofortress
				1	B-52G
				2	B-52H
			4		Cargo/Tanker
				1	Lockheed C-130 (Model 382) Hercules
				1	C-130
				2	AC-130
				3	DC-130
				4	EC-130
				5	HC-130
				6	JC-130
				7	LC-130
				8	MC-130
				9	NC-130
				10	RC-130
				11	WC-130
				12	TC-130
				13	KC-130
				14	CC-130
				15	Hercules C. Mk 1
				16	Hercules C. Mk 2
				17	Hercules C. Mk 3P
				19	T.10
				20	TK.10
				21	TL.10
				22	Tp 84
				23	C-130H
				24	C-130H-30
				25	KC-130H
				26	C-130H-MP
				27	VC-130H

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
				2	Lockheed C-5 Galaxy
				1	C-5A
				2	C-5B
				3	Lockheed C-141 Starlifter
				1	C-141A
				2	C-141B
				4	C-135
				5	Boeing KC-135 Stratotanker
				1	KC-135A
				2	KC-135E
				3	KC-135Q
				4	KC-135R
				6	McDonnell-Douglas KC-10 Extender
				1	KC-10A
				7	Boeing 707 tanker/transport
				2	T.17
				8	Boeing 707
				1	VC-137
				9	McDonnell-Douglas C-17A
				10	Boeing 747
				1	C-25A
				2	VC-25A "Air Force One"
				3	Boeing/Rockwell YAL-1 Airborne Laser (ABL)
				11	Gulfstream Aerospace Gulfstream III
				1	C-20
				12	Learjet 35A/36A
				1	C-21A
				13	Lockheed Model 1329-25 Jetstar II
				1	C-140
				14	Douglas DC-3
				1	C-47
				2	R4D
				3	Dakota
				15	McDonnell-Douglas DC-9
				1	C-9A
				2	VC-9C
				3	C-9B

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
				16	Beechcraft Super King Air 200/B200 1 C-12
				17	Bell/Boeing V-22 Osprey
				18	Rockwell T-39 Saberliner
				19	Grumman C-2A Greyhound (COD)
				21	Lockheed Model L100 1 L100-30 (hospital)
				22	Grumman KA-6 Intruder Tanker 1 KA-6D 2 KA-6H

5 Antisubmarine/patrol/observation

- 1 Lockheed Model 185/285 Orion
 - 1 P-3
 - 2 P-3C
 - 3 UP-3
 - 4 UP-3C
 - 5 EP-3
 - 6 P-3J
 - 7 P-3W
 - 8 P-3 AEW&C
 - 9 CF-140 Aurora
 - 10 CP-140 Arcturus
 - 11 EP-3E
- 2 Lockheed S-3 Viking
 - 1 S-3B
 - 2 ES-3
 - 3 KS-3
- 3 Rockwell International OV-10 Bronco
 - 1 OV-10
 - 2 OV-10D Plus
- 4 Schweizer SA 2-37A
 - 1 RG-8A

6 Electronic Warfare (EW)

- 7 Grumman (General Dynamics) EF-111 Raven
 - 1 EF-111A

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
				8	EC-130 Compass Call Electronic Combat (C2W)
				9	Grumman EA-6 Prowler
				1	EA-6A
				2	EA-6B
			7		Reconnaissance
				1	Lockheed SR-71 Blackbird
				1	SR-71B
				2	(deleted)
				3	Lockheed U-2
				1	U-2R
				2	ER-2
				3	U-2S
				4	McDonnell-Douglas F-4 Phantom II
				1	RF-4B
				2	YRF-4C
				3	RF-4C
				4	RF-4E
				5	RF-4EJ
				5	Sadler A-22 LASA
				6	Boeing Canada DHC-7 Airborne Reconnaissance--Low (ARL)
				7	Boeing RC-135
				1	RC-135S Cobra Ball
				2	RC-135U Combat Sent
				3	RC-135 V/W Rivet Joint
				4	RC-135X Cobra Eye
				8	Beechcraft Super King AIR 200/B200
				1	RC-12H Guardrail Common Sensor
				2	RC-12D
			8		Surveillance / C ² (Airborne Early Warning)
				1	Grumman E-2 Hawkeye
				1	E-2C
				2	TE-2C
				2	EA-3
				2	EA-3B
				3	Boeing E-6A Mercury (TACAMO II)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
				4	Boeing E-3 Sentry
				1	E-3A Airborne Warning and Control System (AWACS)
				2	E-3B AWACS
				3	E-3C AWACS
				4	E-3D Sentry AEW. Mk 1
				5	E-3F System de Detection Aeroporte
				6	KE-3A AWACS (Saudi Arabia)
				5	Boeing E-4 Advanced Airborne Command Post (AABNCP)
				1	E-4A
				2	E-4B
				6	Boeing/Grumman E-8 (JSTARS)
				7	Aerostat
				8	EC-130E Airborne Command, Control and Communications (ABCCC)
				9	EC-135 Airborne Command Post
				20	Attack helicopter
				1	McDonnell-Douglas AH-64 Apache
				1	AH-64A
				2	AH-64B
				3	AH-64C
				4	AH-64D
				5	Petan (Cobra)
				2	Bell Model 209 Hueycobra, Seacobra, Supercobra
				1	AH-1E
				2	AH-1F
				3	AH-1G
				4	AH-1J
				5	AH-1P
				6	AH-1Q
				7	AH-1R
				8	AH-1S
				9	AH-1T
				10	AH-1W
				11	AH-1W Venom
				12	TH-1S
				3	Bell AH-1(4B)W Viper
				4	Boeing/Sikorsky RAH-66 Comanche
				5	McDonnell-Douglas 500/530 Defender
				2	AH-6
				3	500MG

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			4 530MG
					6 500 D/E

21 Utility helicopter

1 Bell model 204 Iroquois

- 1 UH-1A
- 2 UH-1B
- 3 UH-1C
- 4 UH-1E
- 5 UH-1F
- 6 UH-1L
- 7 HH-1K
- 8 TH-1F
- 9 TH-1L
- 10 UH-1HP

2 Sikorsky S-70A

- 1 UH-60A Blackhawk
- 2 UH-60L Blackhawk
- 3 EH-60C

- 5 VH-60N
- 6 UH-60P
- 7 S-70A-1
- 8 S-70A-1L
- 9 S-70A-5
- 10 S-70A-6
- 11 S-70A-9
- 12 S-70A-A9
- 13 S-70A-A11
- 14 S-70A-A12
- 15 S-70A-A14
- 16 S-70A-A16
- 17 S-70A-A17
- 18 S-70A-A18
- 19 S-70A-A19
- 20 S-70A-A20
- 21 S-70A-A21
- 22 S-70A-A22
- 23 S-70A-A24

3 Boeing model 107

- 1 UH-46 Sea Knight
- 2 CH-46 Sea Knight

4 S-70C

- 1 H-60

5 Sikorsky H-76 Eagle

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			

6 Sikorsky-S-76b

22 Antisubmarine Warfare/patrol helicopter

1 Kaman Seasprite and Super Seasprite

1 SH-2

2 Agusta Sikorsky AS-61/ASH-3H Sea King

1 SH-3D

2 SH-3H

3 SH-3D/TS

4 ASH-3D

5 AS-61

3 Sikorsky S-70B

1 SH-60B Seahawk

2 SH-60F Oceanhawk

3 HH-60H

4 HH-60J Jayhawk

5 HS.23

6 XSH-60J

7 UH-60J

8 S-70B-2

23 Cargo helicopter

1 Boeing Models 114/414

1 CH-47 Chinook

2 CH-47B

3 CH-47C

4 CH-47D

5 CH-147

6 Chinook HC.Mk 1

7 Chinook HC.Mk 2

8 HT.17

2 Sikorsky S-80/H-53

1 CH-53E Super Stallion

2 MH-53E Sea Dragon

3 S-80E

4 S-80M

3 Sikorsky S-65A

1 CH-53A Sea Stallion

2 HH-53B

3 HH-53C

4 CH-53A

5 CH-53D

24 Observation helicopter

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			
				1	Bell Kiowa
				1	OH-58
				2	CH-136
				3	OH-58C
				2	Bell Model 406 AHIP
				1	OH-58D Kiowa/Kiowa Warrior
				3	Bell Model 406 CS Combat Scout
				2	MH-58D Combat Scout
			25		Special Operations helicopter
				1	Sikorsky S-70A
				1	MH-60A
				2	MH-60G Pave Hawk
				3	MH-60K
				4	MH-60L
				2	Boeing models 114/414
				1	MH-47E
				3	Sikorsky S-65/MH-53J Pave Low III Enhanced
				1	HH-53B
				2	HH-53C
				3	CH-53C
				4	MH-53J
				4	McDonnell-Douglas 500/530 Defender
				1	MH-6
				3	MH-6J
			40		Trainer
				1	Cessna 172
				1	T-41
				2	Cessna 318
				1	T-37
				3	Northrop Talon
				1	T-38
				4	McDonnell-Douglas/BAe T45TS
				1	T-45 Goshawk
				5	Beechcraft T-34C
				1	T-34C
				6	Beechcraft Sierra 200/Sundowner 180
				1	CT-134A Musketeer II

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	225			

7 Lockheed T-33

8 Beechcraft Model 400A Beechjet

1 T-1A Jayhawk

9 Boeing TC-135

1 TC-135W Rivet Joint Trainer

2 TC-135S Cobra Ball Trainer

11 Cessna 208 Caravan

12 Cessna Citation

13 Raytheon / Pilatus PC-9 Mk II (Beech Mk II)

1 T-6A Texan II

50 Unmanned Air Vehicle

1 TRW/IAI Hunter - land based

2 TRW/IAI Hunter - shipboard variant

3 Maneuver UAV

4 General Atomics Predator UAV

5 Lockheed Martin / Boeing Darkstar UAV

6 Teledyne-Ryan Globalhawk UAV

7 Alliant Techsystems Outrider UAV (formerly known as the Tactical UAV or TUAV)

57 Non-Combatant Commercial Aircraft

1 Passenger Airline

1 Boeing 747-400

2 Boeing 757-200

3 MD-82

4 MD-82T

5 MD-90-30-T

6 Boeing 727

7 Boeing 737

8 Boeing 767

9 DC-10

10 Lockheed L-1011 Tristar

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

1 Carrier

1 Nimitz Class

- 1 CVN 68 Nimitz
- 2 CVN 69 Dwight D. Eisenhower
- 3 CVN 70 Carl Vinson
- 4 CVN 71 Theodore Roosevelt
- 5 CVN 72 George Washington
- 6 CVN 73 Abraham Lincoln
- 7 CVN 74 John C. Stennis
- 8 CVN 75 Harry S. Truman
- 9 CVN 76 Ronald Reagen

2 Enterprise Class

- 1 CVN 65 Enterprise

3 Kitty Hawk/John F. Kennedy Class

- 1 CV 63 Kitty Hawk
- 2 CV 64 Constellation
- 3 CV 66 America
- 4 CV 67 John F. Kennedy

4 Forrestal Class

- 1 AVT 59 Forrestal
- 2 CV 60 Saratoga
- 3 CV 61 Ranger
- 4 CV 62 Independence

2 Command Ship/Cruiser

1 Blue Ridge Class

- 1 LCC 19 Blue Ridge
- 2 LLC 20 Mount Whitney

2 Raleigh and Austin Classes

- 1 AGF 11 Coronado
- 2 AGF 3 La Salle

3 Guided Missile Cruiser

1 Ticonderoga Class

- 1 CG 47 Ticonderoga
- 2 CG 48 Yorktown
- 3 CG 49 Vincennes
- 4 CG 50 Valley Forge
- 5 CG 51 Thomas S. Gates
- 6 CG 52 Bunker Hill
- 7 CG 53 Mobile Bay
- 8 CG 54 Antietam
- 9 CG 55 Leyte Gulf
- 10 CG 56 San Jacinto
- 11 CG 57 Lake Champlain

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			
					12 CG 58 Philippine Sea
					13 CG 59 Princeton
					14 CG 60 Normandy
					15 CG 61 Monterey
					16 CG 62 Chancellorsville
					17 CG 63 Cowpens
					18 CG 64 Gettysburg
					19 CG 65 Chosin
					20 CG 66 Hue City
					21 CG 67 Shiloh
					22 CG 68 Anzio
					23 CG 69 Vicksburg
					24 CG 70 Lake Erie
					25 CG 71 Cape St. George
					26 CG 72 Vella Gulf
					27 CG 73 Port Royal
					2 Virginia Class
					1 CGN 38 Virginia
					2 CGN 39 Texas
					3 CGN 40 Mississippi
					4 CGN 41 Arkansas
					3 California Class
					1 CGN 36 California
					2 CGN 37 South Carolina
					4 Truxtun Class
					1 CGN 35 Truxtun
					5 Belknap Class
					1 CG 26 Belknap
					6 Bainbridge Class
					1 CGN 25 Bainbridge
					7 Leahy Class
					4 CG 19 Dale
					5 CG 20 R. K. Turner
					4 Guided Missile Destroyer
					1 Arleigh Burke Class
					1 DDG 51 Arleigh Burke
					2 DDG 52 Barry
					3 DDG 53 John Paul Jones
					4 DDG 54 Curtis Wilbur
					5 DDG 55 Stout
					6 DDG 56 John S. McCain
					7 DDG 57 Mitscher
					8 DDG 58 Laboon
					9 DDG 59 Russell

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			
					10 DDG 60 Paul Hamilton
					11 DDG 61 Ramage
					12 DDG 62 Fitzgerald
					13 DDG 63 Stethem
					14 DDG 64 Carney
					15 DDG 65 Benfold
					16 DDG 66 Gonzalez
					17 DDG 67 Cole
					18 DDG 68 The Sullivans
					19 DDG 69 Milius
					20 DDG 70 Hopper
					21 DDG 71 Ross
					22 DDG 72 Mahan
					23 DDG 73 DeCatur
					24 DDG 74 McFaul
					25 DDG 75 Donald Cook
					26 DDG 76 Higgins
					2 Kidd Class
					1 DDG 993 Kidd
					2 DDG 994 Callaghan
					3 DDG 995 Scott
					4 DDG 996 Chandler
					3 Coontz Class
					1 DDG 39 MacDonough
					2 DDG 43 Dahlgren
					4 Charles F. Adams Class
					1 DDG 2 Charles F. Adams
					5 Modified Charles F. Adams Class
					1 DDG 38 Perth (Australia)
					2 DDG 39 Hobart (Australia)
					3 DDG 41 Brisbane (Australia)
					5 Destroyer
					1 Spruance Class
					1 DD 963 Spruance
					2 DD 964 Paul F. Foster
					3 DD 965 Kinkaid
					4 DD 966 Hewitt
					5 DD 967 Elliott
					6 DD 968 A. W. Radford
					7 DD 969 Peterson
					8 DD 970 Caron
					9 DD 971 David R. Ray
					10 DD 972 Olendorf
					11 DD 973 John Young
					12 DD 974 Comte De Grasse
					13 DD 975 O'Brien

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			
					14 DD 976 Merrill
					15 DD 977 Briscoe
					16 DD 978 Stump
					17 DD 979 Conolly
					18 DD 980 Moosebrugger
					19 DD 981 John Hancock
					20 DD 982 Nicholson
					21 DD 983 John Rodgers
					22 DD 984 Leftwich
					23 DD 985 Cushing
					24 DD 986 Harry W. Hill
					25 DD 987 O'Bannon
					26 DD 988 Thorn
					27 DD 989 Deyo
					28 DD 990 Ingersoll
					29 DD 991 Fife
					30 DD 992 Fletcher
					31 DD 997 Hayler

2 Modified Gearing FRAM I Class (Turkey)

6 Guided Missile Frigate

1 Oliver Perry Class

- 1 FFG 7 O.H. Perry
- 2 FFG 8 McInerney
- 3 FFG 9 Wadsworth
- 4 FFG 10 Duncan
- 5 FFG 11 Clark
- 6 FFG 12 George Philip
- 7 FFG 13 Sam E. Morison
- 8 FFG 14 Sides
- 9 FFG 15 Estocin
- 10 FFG 16 Clifton Sprague
- 11 FFG 19 John A. Moore
- 12 FFG 20 Antrim
- 13 FFG 21 Flatley
- 14 FFG 22 Fahrion
- 15 FFG 23 Lewis B. Puller
- 16 FFG 24 Jack Williams
- 17 FFG 25 Copeland
- 18 FFG 26 Gallery
- 19 FFG 27 M. S. Tisdale
- 20 FFG 28 Boone
- 21 FFG 29 S. W. Groves
- 22 FFG 30 Reid
- 23 FFG 31 Stark
- 24 FFG 32 John L. Hall
- 25 FFG 33 Jarrett
- 26 FFG 34 Aubrey Fitch
- 27 FFG 36 Underwood
- 28 FFG 37 Crommelin

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			
					29 FFG 38 Curts
					30 FFG 39 Doyle
					31 FFG 40 Halyburton
					32 FFG 41 McClusky
					33 FFG 42 Klakring
					34 FFG 43 Thatch
					35 FFG 45 De Wert
					36 FFG 46 Rentz
					37 FFG 47 Nicholas
					38 FFG 48 Vandegrift
					39 FFG 49 R. G. Bradley
					40 FFG 50 Jesse L. Taylor
					41 FFG 51 Gary
					42 FFG 52 Carr
					43 FFG 53 Hawes
					44 FFG 54 Ford
					45 FFG 55 Elrod
					46 FFG 56 Simpson
					47 FFG 57 Reuben James
					48 FFG 58 Sam B. Roberts
					49 FFG 59 Kauffman
					50 FFG 60 Rodney M. Davis
					51 FFG 61 Ingraham
					52 F 81 Santa Maria (Spain)
					53 F 82 Victoria (Spain)
					54 F 83 Numancia (Spain)
					55 F 84 Reina Sofia (Spain)
					56 F 85 Navarra (Spain)
					57 F 86 Canarias (Spain)
					58 FFG 01 Adelaide (Australia)
					59 FFG 02 Canberra (Australia)
					60 FFG 03 Sydney (Australia)
					61 FFG 04 Darwin (Australia)
					62 FFG 05 Melbourne (Australia)
					63 FFG 06 Newcastle (Australia)

7 Light/patrol craft

1 PC Class

- 1 PC 1 Cyclone
- 2 PC 2 Tempest
- 3 PC 3 Hurricane
- 4 PC 4 Monsoon
- 5 PC 5 Typhoon
- 6 PC 6 Sirocco
- 7 PC 7 Squall
- 8 PC 8 Zephyr
- 9 PC 9 Chinook
- 10 PC 10 Firebolt
- 11 PC 11 Whirlwind
- 12 PC 12 Thunderbolt
- 13 PC 13 Shamal

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

8 Mine countermeasure ship/craft

1 Osprey class

- 1 MHC 51 Osprey
- 2 MHC 52 Heron
- 3 MHC 53 Pelican
- 4 MHC 54 Robin
- 5 MHC 55 Oriole
- 6 MHC 56 Kingfisher
- 7 MHC 57 Cormorant

2 Avenger Class

- 1 MCM 1 Avenger
- 2 MCM 2 Defender
- 3 MCM 3 Sentry
- 4 MCM 4 Champion
- 5 MCM 5 Guardian
- 6 MCM 6 Devastator
- 7 MCM 7 Patriot
- 8 MCM 8 Scout
- 9 MCM 9 Pioneer
- 10 MCM 10 Warrior
- 11 MCM 11 Gladiator
- 12 MCM 12 Ardent
- 13 MCM 13 Dextrous
- 14 MCM 14 Chief

3 Acme Class

- 2 MSO 511 Affray

4 Agile/Aggressive Class

- 1 MSO 427 Constant
- 5 MSO 439 Excel
- 6 MSO 440 Exploit
- 10 MSO 446 Fortify
- 12 MSO 449 Impervious
- 16 MSO 488 Conquest
- 17 MSO 489 Gallant
- 19 MSO 492 Pledge

9 Dock Landing Ship

1 Whidbey Island Class

- 1 LSD 41 Whidbey Island
- 2 LSD 42 Germantown
- 3 LSD 43 Fort McHenry
- 4 LSD 44 Gunston Hall
- 5 LSD 45 Comstock
- 6 LSD 46 Tortuga
- 7 LSD 47 Rushmore
- 8 LSD 48 Ashland

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

- 9 LSD 49 Harpers Ferry
- 10 LSD 50 Carter Hall
- 11 LSD 51 Oak Hill
- 12 LSD 52 Pearl Harbor

2 Anchorage Class

- 1 LSD 36 Anchorage
- 2 LSD 37 Portland
- 3 LSD 38 Pensacola
- 4 LSD 39 Mount Vernon
- 5 LSD 40 Fort Fisher

10 Tank Landing Ship

1 Newport Class

- 1 LST 1179 Newport
- 2 LST 1180 Manitowac
- 3 LST 1181 Sumter
- 4 LST 1182 Fresno
- 5 LST 1183 Peoria
- 6 LST 1184 Frederick
- 7 LST 1185 Schenectady
- 8 LST 1186 Cayuga
- 9 LST 1187 Tuscaloosa
- 10 LST 1188 Saginaw
- 11 LST 1189 San Bernardino
- 12 LST 1190 Boulder
- 13 LST 1191 Racine
- 14 LST 1192 Spartanburg County
- 15 LST 1193 Fairfax County
- 16 LST 1194 La Moure County
- 18 LST 1196 Harlan County
- 19 LST 1197 Barnstable County
- 20 LST 1198 Bristol County

11 Landing Craft

- 1 Landing Craft Air Cusion (LCAC)
- 2 LCU 1600 Class: Utility Landing Craft
- 3 LCU 6 Type: Mechanized Landing Craft
- 4 Landing Craft Personnel (LCPL)
- 5 Amphibious Assault Vehicle (AAV)

14 Hydrofoil

1 Pegasus class

- 1 PHM 1 Pegasus
- 2 PHM 2 Hercules

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			3 PHM 3 Taurus 4 PHM 4 Aquila 5 PHM 5 Aries 6 PHM 6 Gemini

16 Auxiliary

1 Cimarron class (Fleet Oilers)

- 1 AO 177 Cimarron
- 2 AO 178 Monongahela
- 3 AO 179 Merrimack
- 4 AO 180 Willamette
- 5 AO 186 Platte

8 Wichita class (Replenishment Oilers)

- 1 AOR 1 Wichita
- 2 AOR 2 Milwaukee
- 3 AOR 3 Kansas City
- 4 AOR 4 Savannah
- 5 AOR 5 Wabash
- 6 AOR 6 Kalamazoo
- 7 AOR 7 Roanoke

12 Vulcan class (Repair Ship)

- 1 AR 8 Jason

13 Fulton class (Submarine Tenders)

- 1 AS 18 Orion

14 Proteus class (Submarine Tenders)

- 1 AS 19 Proteus

15 Hunley class (Submarine Tenders)

- 1 AS 31 Hunley
- 2 AS 32 Holland

16 Simon Lake class (Submarine Tenders)

- 1 AS 33 Simon Lake
- 2 AS 34 Canopus

17 Spear class (Submarine Tenders)

- 1 AS 36 L. Y. Spear
- 2 AS 37 Dixon

18 Emory S. Land class (Submarine Tenders)

- 1 AS 39 Emory S. Land
- 2 AS 40 Frank Cable
- 3 AS 41 McKee

19 Bolster class (Salvage Ships)

- 1 ARS 8 Preserver
- 2 ARS 38 Bolster

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			3 ARS 39 Conserver 4 ARS 40 Hoist 5 ARS 41 Opportune 6 ARS 42 Reclaimer 7 ARS 43 Recovery
				20	Safeguard class (Salvage Ships) 1 ARS 50 Safeguard 2 ARS 51 Grasp 3 ARS 52 Salvor 4 ARS 53 Grapple
				21	Edenton class (Salvage Ships) 1 ATS 1 Edenton 2 ATS 2 Beaufort 3 ATS 3 Brunswick
				22	Chanticleer class (Submarine Rescue) 1 ASR 13 Kittiwake 2 ASR 15 Sunbird
				23	Pigeon class (Submarine Rescue) 1 ASR 21 Pigeon 2 ASR 22 Ortolan
				24	Abnaki class (Fleet Ocean Tugs) 1 ATF 159 Paiute 2 ATF 160 Papago
				17	Auxiliary, Merchant Marine
				1	Fleet Ballistic Missile Support Ships (Naval Fleet) 1 TAK 282 Marshfield 2 TAK 286 Vega
				2	Ammunition Ship (Naval Fleet) 1 TAE 26 Kilauea
				3	Fleet Stores Ship (Naval Fleet) 1 TAF 58 Rigel
				4	Combat Stores Ships (Naval Fleet) 1 TAFS 8 Sirius 2 TAFS 9 Spica 3 TAFS 10 Saturn
				5	Neosho class (Naval Fleet Oilers) 1 TAO 143 Neosho 2 TAO 146 Kawishiwi 3 TAO 148 Ponchatoula
				6	Henry J. Kaiser class (Naval Fleet Oilers) 1 TAO 187 Henry J. Kaiser

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

- 2 TAO 188 Joshua Humphreys
- 3 TAO 189 John Lenthall
- 4 TAO 190 Andrew J. Higgins
- 5 TAO 191 Benjamin Isherwood
- 6 TAO 192 Henry Eckford
- 7 TAO 193 Walter S. Diehl
- 8 TAO 194 John Ericsson
- 9 TAO 195 Leroy Grumman
- 10 TAO 196 Kanawha
- 11 TAO 197 Pecos
- 12 TAO 198 Big Horn
- 13 TAO 199 Tippecanoe
- 14 TAO 200 Guadaloupe
- 15 TAO 201 Patuxent
- 16 TAO 202 Yukon
- 17 TAO 203 Laramie
- 18 TAO 204 Rappahannock

7 Powhatan class (Fleet Ocean Tugs)

- 1 TATF 166 Powhatan
- 2 TATF 167 Narragansett
- 3 TATF 168 Catawba
- 4 TATF 169 Navajo
- 5 TATF 170 Mohawk
- 6 TATF 171 Sioux
- 7 TATF 172 Apache

9 Maritime Prepositioning Ships (MPS)

- 1 TAK 3000 Cpl Louis Hauge Jr.
- 2 TAK 3001 Pfc William Baugh
- 3 TAK 3002 Pfc James Anderson Jr.
- 4 TAK 3003 1st Lt Alexander Bonnyman Jr.
- 5 TAK 3004 Pvt Harry Fisher
- 6 TAK 3005 Sgt Matej Kocak
- 7 TAK 3006 Pfc Eugene A. Obregon
- 8 TAK 3007 Maj Stephen W. Pless
- 9 TAK 3008 2nd Lt John P. Bobo
- 10 TAK 3009 Pfc Dewayne T. Williams
- 11 TAK 3010 1st Lt Baldomero Lopez
- 12 TAK 3011 1st Lt Jack Lummus
- 13 TAK 3012 Staff Sgt William R. Button

10 Lash (Preposition)

- 1 TAK 1015 Green Island
- 2 TAK 2043 American Kestrel
- 3 TAK 2046 Austral Rainbow
- 4 TAK 2064 Green Harbour

11 Freighters (Preposition)

- 1 TAK 5076 Noble Star
- 2 TAK 2040 Advantage
- 3 TAK 2062 American Cormorant

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

12 Tankers (PRE-POSITION)

- 1 TAOT 170 Sealift China Sea
- 2 TAOT 181 Potomac

13 Tankers (Ocean Transportation)

- 1 TAOT 168 Sealift Pacific
- 2 TAOT 169 Sealift Arabian Sea
- 3 TAOT 171 Sealift Indian Ocean
- 4 TAOT 172 Sealift Atlantic
- 5 TAOT 173 Sealift Mediterranean
- 6 TAOT 174 Sealift Caribbean
- 7 TAOT 175 Sealift Arctic
- 8 TAOT 176 Sealift Antarctic
- 9 TAOT 1121 Gus W. Darnell
- 10 TAOT 1122 Paul Buck
- 11 TAOT 1123 Samuel L. Cobb
- 12 TAOT 1124 Richard G. Matthieson
- 13 TAOT 1125 Lawrence H. Gianella

14 Fast Sealift Ships (Strategic Sealift)

- 1 TAKR 287 Algol
- 2 TAKR 288 Bellatrix
- 3 TAKR 289 Denebola
- 4 TAKR 290 Pollux
- 5 TAKR 291 Altair
- 6 TAKR 292 Regulus
- 7 TAKR 293 Capella
- 8 TAKR 294 Antares

15 Aviation Support Ships (Strategic Sealift)

- 1 TAVB 3 Wright
- 2 TAVB 4 Curtiss

16 Hospital Ships (Strategic Sealift)

- 1 TAH 19 Mercy
- 2 TAH 20 Comfort

17 Frigate Research Ship (Special Mission Support)

- 1 T-AGFF1 Glover

18 Missile Range Instrumentation Ships (Special Mission Support)

- 1 TAGM 20 Redstone
- 2 TAGM 22 Range Sentinel
- 3 TAGM 23 Observation Island

19 Oceanographic Research Ships (Special Mission Support)

- 1 TAGOR 10 Thomas Washington (loan)
- 2 TAGOR 12 De Steigneur
- 3 TAGOR 13 Bartlett
- 4 TAGOR 14 Melville (loan)
- 5 TAGOR 15 Knorr (loan)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

- 6 TAGOR 21 Gyre (loan)
- 7 TAGOR 22 Moana Wave (loan)
- 8 TAGOR 23 Thomas G. Thompson (loan)
- 9 TAGOR 195 Hayes

20 Surveying Ships (Special Mission Support)

- 1 TAGS 26 Silas Bent
- 2 TAGS 27 Kane
- 3 TAGS 29 Chauvenet
- 4 TAGS 32 Harkness
- 5 TAGS 33 Wilkes
- 6 TAGS 34 Wyman
- 7 TAGS 39 Maury
- 8 TAGS 40 Tanner
- 9 TAGS 45 Waters
- 10 TAGS 51 John McDonnell
- 11 TAGS 52 Littlehales
- 12 TAGS 60 Pathfinder
- 13 TAGS 61 Sumner

21 Navigation Test Support Ship (Special Mission Support)

- 1 TAG 194 Vanguard

22 Cable Repair Ships (Special Mission Support)

- 1 TARC 6 Albert J. Myer
- 2 TARC 7 Zeus

23 Deep Submergence Support Ship (Special Mission Support)

- 1 TAGDS 2 Point Loma

50 Frigate

1 Knox Class

- 5 FF 1056 Connole
- 12 FF 1063 Reasoner
- 13 FF 1064 Lockwood
- 14 FF 1065 Stein
- 15 FF 1066 Marvin Shields
- 16 FF 1067 F. Hammond
- 17 FF 1068 Vreeland
- 19 FF 1070 Downes
- 22 FF 1073 R. E. Peary
- 23 FF 1074 Harold E. Holt
- 24 FF 1075 Trippe
- 25 FF 1076 Fanning
- 26 FF 1077 Ouellet
- 27 FF 1078 Joseph Hewes
- 28 FF 1079 Bowen
- 29 FF 1080 Paul
- 30 FF 1081 Aylwin
- 31 FF 1082 E. Montgomery
- 32 FF 1083 Cook

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			
					33 FF 1084 McCandless
					34 FF 1085 D. B. Beary
					36 FF 1087 Kirk
					38 FF 1089 J. L. Brown
					39 FF 1090 Ainsworth
					41 FF 1092 T. C. Hart
					42 FF 1093 Capodanno
					43 FF 1094 Pharris
					44 FF 1095 Truett
					46 FF 1097 Moinester

51 Battleship

52 Heavy Cruiser

53 Destroyer Tender

1 Sam Gompers/Yellowstone Class

- 1 AD 37 Samuel Gompers
- 2 AD 38 Puget Sound
- 3 AD 41 Yellowstone
- 4 AD 42 Acadia
- 5 AD 43 Cape Cod
- 6 AD 44 Shenandoah

2 Dixie Class

- 1 AD 15 Prairie
- 2 AD 18 Sierra
- 3 AD 19 Yosemite

54 Amphibious Assault Ship

1 Tarawa Class

- 1 LHA 1 Tarawa
- 2 LHA 2 Saipan
- 3 LHA 3 Belleau Wood
- 4 LHA 4 Nassau
- 5 LHA 5 Peleliu

2 Iwo Jima Class

- 1 LPH 2 Iwo Jima
- 2 LPH 3 Okinawa
- 3 LPH 7 Guadalcanal
- 4 LPH 9 Guam
- 5 LPH 10 Tripoli
- 6 LPH 11 New Orleans
- 7 LPH 12 Inchon

3 Wasp Class

- 1 LHD 1 Wasp
- 2 LHD 2 Essex
- 3 LHD 3 Kearsage

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			
				4	LHD 4 Boxer
				5	LHD 5 Bataan
				6	LHD 6 Bonhomme Richard

55 Amphibious Cargo Ship

1 Charleston Class

- 1 LKA 113 Charleston
- 2 LKA 114 Durham
- 3 LKA 115 Mobile
- 4 LKA 116 St. Louis
- 5 LKA 117 El Paso

56 Amphibious Transport Dock

1 Austin Class

- 1 LPD 4 Austin
- 2 LPD 5 Ogden
- 3 LPD 6 Duluth
- 4 LPD 7 Cleveland
- 5 LPD 8 Dubuque
- 6 LPD 9 Denver
- 7 LPD 10 Juneau
- 8 LPD 12 Shreveport
- 9 LPD 13 Nashville
- 10 LPD 14 Trenton
- 11 LPD 15 Ponce

57 Ammunition Ship

1 Kilauea Class

- 1 T-AE 26 Kilauea
- 2 AE 27 Butte
- 3 AE 28 Santa Barbara
- 4 AE 29 Mount Hood
- 5 AE 32 Flint
- 6 AE 33 Shasta
- 7 AE 34 Mount Baker
- 8 AE 35 Kiska

2 Suribachi Class

- 1 AE 21 Suribachi
- 2 AE 22 Mauna Kea
- 3 AE 23 Nitro
- 4 AE 24 Pyro
- 5 AE 25 Haleakala

3 (deleted)

58 Combat Stores Ship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

2 Mars Class

- 1 AFS 1 Mars
- 2 AFS 2 Sylvania
- 3 AFS 3 Niagara Falls
- 4 AFS 4 White Plains
- 5 AFS 5 Concord
- 6 AFS 6 San Diego
- 7 AFS 7 San Jose

59 Surveillance Towed Array Sonar System (SURTASS)

2 SWATH-S (Small) class

- 1 TAGOS 19 Victorious
- 2 TAGOS 20 Able
- 3 TAGOS 21 Effective
- 4 TAGOS 22 Loyal

3 SWATH-L (Large) class

- 1 TAGOS 23 Impeccable

8 Stalwart Class (Ocean Surveillance)

- 1 TAGOS 1 Stalwart
- 2 TAGOS 2 Contender
- 3 TAGOS 3 Vindicator
- 4 TAGOS 4 Triumph
- 5 TAGOS 5 Assurance
- 6 TAGOS 6 Persistent
- 7 TAGOS 7 Indomitable
- 8 TAGOS 8 Prevail
- 9 TAGOS 9 Assertive
- 10 TAGOS 10 Invincible
- 11 TAGOS 11 Audacious
- 12 TAGOS 12 Bold
- 13 TAGOS 13 Adventurous
- 14 TAGOS 14 Worthy
- 15 TAGOS 15 Titan
- 16 TAGOS 16 Capable
- 17 TAGOS 17 Intrepid
- 18 TAGOS 18 Relentless

60 Fast Combat Support Ship

1 Sacramento Class

- 1 AOE1 Sacramento
- 2 AOE2 Camden
- 3 AOE3 Seattle
- 4 AOE4 Detroit

2 Supply Class

- 1 AOE6 Supply
- 2 AOE7 Rainier
- 3 AOE8 Arctic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	225			

61 Non-Combatant Ship

- 1 Container Class**
 - 1 American Kentucky**
- 2 Tanker**
 - 1 Texaco Georgia**
- 3 Large Fishing Trawler**
- 4 Medium Fishing Boat**
- 5 Small Fishing Boat**
- 6 Two Masted Fishing Boat**
- 7 Single Masted Fishing Boat**

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	225			

1 SSBN (Nuclear Ballistic Missile)

1 James Madison class

- 1 SSBN 629 Daniel Boone
- 2 SSBN 630 John C. Calhoun
- 3 SSBN 632 Von Steuben
- 4 SSBN 633 Casimir Pulaski
- 5 SSBN 634 Stonewall Jackson

2 Benjamin Franklin class

- 1 SSBN 640 Benjamin Franklin
- 2 SSBN 641 Simon Bolivar
- 3 SSBN 642 Kamehameha
- 4 SSBN 643 George Bancroft
- 5 SSBN 645 James K. Polk
- 6 SSBN 655 Henry L. Stimson
- 7 SSBN 657 Francis Scott Key
- 8 SSBN 658 Mariano G. Vallejo

3 Ohio class

- 1 SSBN 726 Ohio
- 2 SSBN 727 Michigan
- 3 SSBN 728 Florida
- 4 SSBN 729 Georgia
- 5 SSBN 730 Henry M. Jackson
- 6 SSBN 731 Alabama
- 7 SSBN 732 Alaska
- 8 SSBN 733 Nevada
- 9 SSBN 734 Tennessee
- 10 SSBN 735 Pennsylvania
- 11 SSBN 736 West Virginia
- 12 SSBN 737 Kentucky
- 13 SSBN 738 Maryland
- 14 SSBN 739 Nebraska
- 15 SSBN 740 Rhode Island
- 16 SSBN 741 Maine
- 17 SSBN 742 Wyoming

3 SSN (Nuclear Attack-Torpedo)

1 Seawolf class

- 1 SSN 21 Seawolf

2 Sturgeon class

- 1 SSN 637 Sturgeon
- 2 SSN 638 Whale
- 3 SSN 639 Tautog
- 4 SSN 646 Grayling
- 5 SSN 647 Pogy
- 6 SSN 648 Aspro
- 7 SSN 649 Sunfish
- 8 SSN 650 Pargo

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	225			
					9 SSN 652 Puffer
					10 SSN 653 Ray
					11 SSN 660 Sand Lance
					12 SSN 662 Gurnard
					13 SSN 663 Hammerhead
					14 SSN 666 Hawkbill
					15 SSN 667 Bergall
					16 SSN 668 Spadefish
					17 SSN 669 Seahorse
					18 SSN 670 Finback
					19 SSN 672 Pintado
					20 SSN 673 Flying Fish
					21 SSN 674 Trepang
					22 SSN 675 Bluefish
					23 SSN 676 Billfish
					24 SSN 677 Drum
					25 SSN 678 Archerfish
					26 SSN 679 Silversides
					27 SSN 680 William H. Bates
					28 SSN 681 Batfish
					29 SSN 682 Tunny
					30 SSN 683 Parche
					31 SSN 684 Cavalla
					32 SSN 686 L. Mendel Rivers
					33 SSN 687 Richard B. Russell

3 Narwhal class

- 1 SSN 671 Narwhal

4 Los Angeles class

- 1 SSN 688 Los Angeles
- 2 SSN 689 Baton Rouge
- 3 SSN 690 Philadelphia
- 4 SSN 691 Memphis
- 5 SSN 692 Omaha
- 6 SSN 693 Cincinnati
- 7 SSN 694 Groton
- 8 SSN 695 Birmingham
- 9 SSN 696 New York City
- 10 SSN 697 Indianapolis
- 11 SSN 698 Bremerton
- 12 SSN 699 Jacksonville
- 13 SSN 700 Dallas
- 14 SSN 701 La Jolla
- 15 SSN 702 Phoenix
- 16 SSN 703 Boston
- 17 SSN 704 Baltimore
- 18 SSN 705 City of Corpus Christi
- 19 SSN 706 Albuquerque
- 20 SSN 707 Portsmouth
- 21 SSN 708 Minneapolis-Saint Paul
- 22 SSN 709 Hyman G. Rickover

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	225			
					23 SSN 710 Augusta
					24 SSN 711 San Francisco
					25 SSN 712 Atlanta
					26 SSN 713 Houston
					27 SSN 714 Norfolk
					28 SSN 715 Buffalo
					29 SSN 716 Salt Lake City
					30 SSN 717 Olympia
					31 SSN 718 Honolulu
					32 SSN 719 Providence
					33 SSN 720 Pittsburgh
					34 SSN 721 Chicago
					35 SSN 722 Key West
					36 SSN 723 Oklahoma City
					37 SSN 724 Louisville
					38 SSN 725 Helena
					39 SSN 750 Newport News
					40 SSN 751 San Juan
					41 SSN 752 Pasadena
					42 SSN 753 Albany
					43 SSN 754 Topeka
					44 SSN 755 Miami
					45 SSN 756 Scranton
					46 SSN 757 Alexandria
					47 SSN 758 Asheville
					48 SSN 759 Jefferson City
					49 SSN 760 Annapolis
					50 SSN 761 Springfield
					51 SSN 762 Columbus
					52 SSN 763 Santa Fe
					53 SSN 764 Boise
					54 SSN 765 Montpelier
					55 SSN 766 Charlotte
					56 SSN 767 Hampton
					57 SSN 768 Hartford
					58 SSN 769 Toledo
					59 SSN 770 Tucson
					60 SSN 771 Columbia
					61 SSN 772 Greeneville
					62 SSN 773 Cheyenne

7 SSA(Conventional Auxiliary)

1 Dolphin Class

1 AGSS 555 Dolphin

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	225			

0 Other

1 Space Shuttle Vehicle

2 National Launch System (NLS)

1 Manned

1 Space Shuttle Orbiter

1 Atlantis

2 Discovery

3 Columbia

4 Endeavor

5 Enterprise

2 Space Station

1 Freedom

2 Unmanned

1 Communication satellite

1 Leasat

2 DSCS

3 Fleetsatcom

4 Milstar

5 SDS

6 Tactical Data Relay Satellite System (TDRSS)

7 Lightsat

8 STEP/Eagle

9 LES/Tacsat

2 Navigation satellite

1 Transit

2 Global Positioning System (GPS)

3 Navstar 41-60 (launch 1996 or 1997)

3 Early Warning satellite

1 DSP

4 Electronic Intelligence (ELINT) satellite

1 Rhyolite

2 Magnum

3 Challet/Vortex

4 Jumpseat

5 Meteorology satellite

1 Defense Meteorological Satellite Program (DMSP)

6 Ocean Surveillance satellite

1 White Cloud

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	225			
				7	Imaging Radar Surveillance satellite
				1	Lacrosse
				8	Optical Imaging Surveillance satellite
				1	KH11
				2	Advanced KH11
				9	SDI satellite
				1	Delta 181
				2	E2I (Endo-Exoatmospheric Interceptor)
			3		Booster
				1	Atlas
				2	Conestoga
				3	Delta
				4	Pegasus
				5	Scout
				6	Taurus
				7	Titan
				8	Tomahawk

4.2.3.1.2 C.I.S. Platforms

All C.I.S. platforms have a Kind-field value of 1 and a Country-field value of 222.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			

0 Other

1 Bridges

- 1 PMM-2 Amphibious Bridging and Ferry System
- 2 Amphibious Bridging System (Wheeled) (ABS(W))
- 3 MTU-72 armored bridgelayer
- 4 MTU-20 armored bridgelayer w/bridge
- 5 MTU armored bridgelayer
- 6 TMM truck-mounted treadway
- 7 KMM truck-mounted treadway
- 8 DPP-40 floating bridge equipment
- 9 GSP heavy amphibious ferry
- 10 PVD-20 airortable
- 11 PMP heavy folding pontoon
- 12 PPS heavy girder floating
- 13 PVM foot suspension
- 14 LVM light suspension
- 15 TVM heavy suspension
- 16 Underwater bridge set
- 17 MARM sectional arch
- 18 RMM-4 portable steel fixed
- 19 SARM sectional deck truss
- 20 REM-500 railway and road-section
- 21 NZhM-56 heavy floating railway and road
- 22 Heavy barge
- 23 BMK-T bridging boat
- 24 BMK-130 bridging boat
- 25 BMK-150 bridging boat
- 26 BMK-70 bridging boat
- 27 BMK-90 bridging boat
- 28 MTU-20 armored bridgelayer w/o bridge
- 29 MTU-20 bridge

2 Missile Transporter/Launcher

- 1 SS-25 TEL

1 Tank

1 T-80 MBT

- 1 T-80
- 2 T-80B
- 3 T-80BK
- 4 T-80BV
- 5 T-80BVK
- 6 T-80U
- 7 T-80Uv
- 8 T-80 w/mine plow roller
- 9 T-80Uv w/mine plow roller

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			10 T-80U w/Reactive Armor
					2 T-72 MBT
					1 T-72
					2 T-72M
					3 T-72K
					4 T-72A
					5 T-72AK
					6 T-72B
					7 T-72BK
					8 T-72B1
					9 T-72B1K
					10 T-72 Bv
					11 T-72 Bv w/mine plow roller
					12 T-72 w/mine plow roller
					13 T-72S
					3 T-64 MBT
					1 T-64A
					2 T-64AK
					3 T-64B
					4 T-64BV
					5 T-64B1
					6 T-64B1K
					7 T-64BV1K
					8 T-64R
					9 T-64 Bv w/mine plow roller
					4 T-62 MBT
					1 T-62
					2 T-62K
					3 T-62M
					4 T-62MK
					5 T-62MV
					6 T-62M1
					7 T-62 Bv w/mine plow roller
					5 T-54 MBT
					1 T-54
					2 T-54K
					3 T-54B
					4 T-54BK
					5 T-54M
					6 T-54MK
					6 T-55 MBT
					1 T-55
					2 T-55K
					3 T-55A
					4 T-55AD
					5 T-55AK
					6 T-55AM

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			7 T-55AMD 8 T-55AMK 9 T-55AMV 10 T-55M 11 T-55MK 12 T-55MVK
				8	PT-76 Amphibious light tank 1 PT-76A 2 PT-76B
				9	T-90 MBT
			2		Armored fighting vehicle
				1	BMP-1 1 BMP-1, basic model 1970 2 BMP-1K command 3 BMP-1K3 command 4 BMP-1P w/ AT-4 ATGW 5 BMP-1PK command 6 BRM-1K recon (aka M-1976) 9 BMP-1KShM unarmed command
				2	BMP-2 1 BMP-2 2 BMP-2D 3 BMP-2K 4 BMP-2 w/ KMT-8/KMT-10 5 BVP-2 (Czech)
				3	BMP-3 1 BMP-3 [(SIFV) M1990/1] 2 BMP-3 Reconnaissance Vehicle
				4	BRDM-2 Reconnaissance vehicle 1 BRDM-2 w/ AT-2 ATGM 2 BRDM-2 w/ AT-3 ATGM 3 BRDM-2 w/ AT-5 ATGM 4 BRDM-2-RKhb NBC 5 BRDM-2U command 6 BRDM-2 w/14.5mm
				5	BTR-40 Reconnaissance vehicle 1 BTR-40 2 BTR-40B 3 BTR-40A anti-air 4 BTR-40Kh chemical reconnaissance 5 BTR-40zhd railroad
				6	BTR-152 1 BTR-152

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			

- 2 BTR-152V
- 3 BTR-152V1
- 4 BTR-152V2
- 5 BTR-152V3
- 6 BTR-152K
- 7 BTR-152U
- 8 BTR-152A

7 MT-LB tracked vehicle

- 1 MT-LB 1V12
- 2 MT-LB 1V13 (battery Fire Direction Center (FDC))
- 3 MT-LB 1V14 (battery Command Post)
- 4 MT-LB 1V15 (battalion command)
- 5 MT-LB 1V16 (battalion FDC)
- 6 MT-LB 1V12M (artillery C²)
- 7 MT-LB 1V13M (artillery C²)
- 8 MT-LB 1V14M (artillery C²)
- 9 MT-LB 1V15M (artillery C²)
- 10 MT-LB 1V16M (artillery C²)
- 11 MT-LB 1V21 staff command
- 12 MT-LB 1V22 air defense management
- 13 MT-LB 1V23 C²
- 14 MT-LB 1V24 artillery C³
- 15 MT-LB 1V25 AD management
- 18 MT-LB SNAR-10 radar
- 19 MT-LBV snow/swamp

- 21 MT-LB ambulance
- 22 MT-LBR repair
- 23 MT-LB w/ AT-6 (Anti-Tank Guided Weapon) ATGW

8 BTR-60

- 1 BTR-60
- 2 BTR-60P
- 3 BTR-60PA
- 4 BTR-60PB
- 5 BTR-60PU
- 6 BTR-60PBK command
- 7 BTR-60PU command
- 8 BTR-60PU-12 air defense command
- 9 BTR-601V19 FDC
- 10 BTR-601V18 artillery observation
- 11 BTR-60 R-145BM communications
- 12 BTR-60 R-975 forward air controller
- 13 BTR-60-E-351BR generator
- 14 BTR-60-P-238T switchboard
- 15 BTR-60-P-240T switchboard
- 16 BTR-60-P-241T field telephone

9 BTR-50 Amphibious Tracked APC

- 1 BTR-50P
- 2 BTR-50PA

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			<ul style="list-style-type: none"> 3 BTR-50PK 4 BTR-50PU 5 BTR-50PU R82 6 BTR-50PU-11 7 BTR-50PUM 8 BTR-50PUR 9 BTR-50PK(B) 10 MTP technical support 11 MTK mineclearing 12 MTR-1 repair
					<ul style="list-style-type: none"> 11 BMD airborne fire support vehicle <ul style="list-style-type: none"> 1 BMD-1 2 BMD-1P w/ AT-3 ATGW 3 BMD-2 4 BMD w/ 82-mm mortar 5 BMD KShM command 6 BTR-D 7 BMD-3
					<ul style="list-style-type: none"> 12 BTR-70 <ul style="list-style-type: none"> 1 BTR-70 2 BTR-70 M1986/1 3 BTR-70Kh chemical reconnaissance 4 BTR-70 w/ AGS-17 5 SPR-2 (poss jammer) 6 BTR-70MS communications 7 BTR-70KShM command/staff 8 BTR-70 BREM repair
					<ul style="list-style-type: none"> 13 BTR-80 <ul style="list-style-type: none"> 1 BTR-80 2 BTR-80 M1981/1 command 3 BTR-80 RKhM-4 chemical & reconnaissance 4 BTR-80 UNSh 5 BMM-1 Ambulance 6 BMM-2 Bn Aid Station 7 BMM-3 Mobile Dressing Station
					<ul style="list-style-type: none"> 15 BRDM-1 Reconnaissance vehicle <ul style="list-style-type: none"> 1 BRDM-1 2 BRDM-1-RKhb 3 BRDM-U
					<ul style="list-style-type: none"> 16 BTR-90
					<ul style="list-style-type: none"> 17 GMZ TML
					<ul style="list-style-type: none"> 18 MT-LBu Tracked Vehicle <ul style="list-style-type: none"> 1 Rangir (9S737) C3 Battery Command Post 2 R-330 B Jammer 3 MP22R (1V22R) Division AD

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
					4 MP23R (1V23R) GCI C3
					5 MP24R (1V24R) Artillery Control
					6 MP25R (1V25R) Division AD

3 Armored utility vehicle

- 1 BTS-2 medium armored tractor
- 2 MTP maintenance vehicle
- 3 IMR combat engineer vehicle
- 4 IRM engineer reconnaissance vehicle
- 5 BAT-2 combat engineer vehicle
- 6 MT-LB engineer vehicle
- 7 BTU tank-mounted bulldozer
- 8 BTU-55 tank-mounted bulldozer
- 9 BREM-1 recovery and repair vehicle
- 10 M1977 armored recovery vehicle
- 11 T-54-T armored recovery vehicle
- 12 T-55-T armored recovery vehicle
- 13 T-55-TK armored recovery vehicle
- 14 BTR-50PK(B) amphibious recovery vehicle
- 15 BREM-4 light recovery vehicle
- 16 MTP-LB technical support vehicle

4 Self-propelled artillery

- 1 M-1973 152-mm gun (2S3) (SO-152)
- 2 M-1974 122-mm Howitzer (2S1) (SO-122)
- 6 Frog-3 rocket launcher
- 7 Frog-4 rocket launcher
- 8 Frog-5 rocket launcher
- 9 Frog-7 rocket launcher

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
				10	SS-1 Scud missile launcher
					1 Scud A
					2 Scud B
					3 Scud C
				12	BM-14-17 140-mm rocket launcher
				13	BM-21 122-mm rocket launcher
				14	M-1975 120-mm rocket launcher
				15	BM-24 240-mm rocket launcher
				16	BM-25 250-mm rocket launcher
				17	GMZ TML
				23	2S4 M-1975 240-mm mortar
				24	2S7 M-1975 203-mm gun
				25	M-1976 152-mm gun (2S5)(MSTA-B)
				26	152-mm 2S19 (aka MSTA-S)
				27	120-mm Howitzer/mortar (2S9) (SO-120)
				28	120-mm Howitzer/mortar (2S23)
				29	300-mm BM-30 14/12-round multiple rocket systems (9A52 Smerch)
				30	220-mm BM-22 16-round multiple rocket system (M1977 Uragan)
				31	200-mm 4-round BMD-20 multiple rocket system
				32	140-mm 16-round RPU-14 multiple rocket system
				51	SS-21
				52	2S31 120-mm Combination Gun
			5		Towed artillery
				1	S-23 180-mm field gun
				2	2A36 (M1976) 152-mm field gun
				3	D-20 152-mm gun-Howitzer
				4	D-30 122-mm gun-Howitzer

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
				5	M-46 130-mm field gun
				6	D-30 field Howitzer
				7	T-12/MT-12 100-mm antitank gun
				8	SD-44 gun
				1	SD-44 85-mm auxiliary-propelled field gun
				9	M-1966 76.2-mm mountain gun
				11	M-240 (aka M1953 or M53) 240-mm mortar
				14	2A65 (M1987) 152-mm gun/Howitzer
				16	M1943 (D-1) 152-mm Howitzer
				17	M1937 (ML-20) 152-mm gun/Howitzer
				19	D-74 122-mm field gun
				21	M1938 (M-30) 122-mm Howitzer
				22	2B16 120-mm combination gun
				23	M1944 (BS-3) 100-mm field gun
				24	D-48 85-mm antitank gun
				25	M-1945 (D-44) 85-mm antitank gun
				26	Vasilyek 82-mm automatic mortar
				27	M1942 (ZIS-3) 76-mm divisional gun
				28	SM-4-1 130-mm coastal gun
				29	SPG-9 73-mm recoilless gun
				30	B-10 82-mm recoilless gun
				31	B-11 107-mm recoilless gun
				38	125-mm AT Gun 2A45M
			6		Small wheeled utility vehicle
				1	GAZ-69 4x4 light vehicle
				2	UAZ-469B 4x4 600-kg light vehicle

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
				4	LuAZ-967M amphibious battlefield support vehicle
				5	LuAZ-969 4x4 light vehicle
				6	GAZ-69A 4x4 light vehicle
				7	UAZ-452D 4x4 800-kg light vehicle
			7		Large wheeled utility vehicle
				1	PZM-2 regimental trench-digging machine
				4	ZIL-131 6x6 3500-kg truck
				5	ZIL-151 6x6 2500-kg truck
				6	ZIL-157 6x6 2500-kg truck
				8	GAZ-66 4x4 2000-kg truck
				9	Ural-375 6x6 4000-kg truck
				10	KamAZ-4310
				11	Ural-4320 6x6 4500-kg trucks
				13	KrAZ-255B 6x6 7500-kg truck
				1	Fuel service
				14	Ural-375D 6x6 recovery vehicle
				15	Ural-4320 6x6 recovery vehicle
				16	KET-L 6x6 recovery truck
				17	GAZ-53 4x2 3000-kg truck
				18	Ural-377 6x4 7500-kg truck
				19	ZIL-133 6x4 8000 kg-truck
				20	YaAZ-214 6x6 7000-kg truck
				21	KrAZ-214 6x6 7000-kg truck
				22	KrAZ-206V 6x6 tractor truck
				23	KamAZ-5320 6x4 8000-kg truck
				24	KrAZ-260 6x6 9000-kg truck

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
				25	KrAZ-240 6x6 9000-kg truck
				26	Ural-5323 8x8 9000-kg truck
				27	KrAZ-257 6x4 12000-kg truck
				28	ZIL-135 series 8x8 truck
				29	MAZ-543 8x8 truck
				30	BAZ-5937 6x6 special purpose vehicle
				31	BAZ-5939 6x6 special purpose vehicle
				32	MAZ-535 and MAZ-537 8x8 series
				33	TMK-2 trench-digging machine
				34	PZM regimental trench-digging machine
				35	OPS mobile water-desalination plant
				36	POU mobile water-desalination plant
				37	LBU-200 mobile well-drilling equipment
			8		Small tracked utility vehicle
				1	AT-L light artillery tractor
				2	AT-LM light artillery tractor
				3	ATS-59G medium artillery tractor
				4	ATS-59 medium artillery tractor
				5	MT-S medium transporter
				6	GT-SM amphibious over-snow vehicle
				7	GT-T amphibious over-snow vehicle
				8	MT-L amphibious over-snow vehicle
			9		Large tracked utility vehicle
				1	PTS amphibious transport
				2	PTS-M amphibious vehicle
				3	PTS-2 amphibious vehicle

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
				4	MTK-2 armored mineclearing vehicle
				5	AT-T heavy artillery tractor
				6	MT-T heavy transporter
				7	GM-569 tractor
				8	BTM high-speed ditching machine
				9	BTM-3 high-speed ditching machine
				10	BTM-TMG high-speed ditching machine
				11	BTM-TMG2S high-speed ditching machine
				12	MDK-2 trench-digging machine
				13	MDK-2M trench-digging machine
				14	MDK-3 trench-digging machine
				15	BAT-1 high-speed tractor-mounted bulldozer
				16	BAT-M high-speed tractor-mounted bulldozer
				17	OLT high-speed tractor-mounted bulldozer
				18	OST high-speed tractor-mounted bulldozer
				19	OTT high-speed tractor-mounted bulldozer
				20	GMZ Mine Layer
			10		Mortar
				7	M-36 82-mm
				8	M-37 82-mm
				9	M-37 82-mm "new"
				10	M-41 82-mm
				11	AM 2B9 "Vasilek" 82-mm automatic
				12	M-38 107-mm
				13	2S12 120-mm
			11		Mine plow

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222		1	KMT-5M
			12		Mine rake
			13		Mine roller
			14		Cargo trailer
				1	0 - 0.5 ton
				2	0.51 - 2 ton
				3	2.01 - 5 ton
				4	5.02 - 10 ton
				5	greater than 10 tons
			15		Fuel trailer
				1	1-1000 gallons
				2	1001 - 5000 gallons
				3	greater than 5000 gallons
			16		Generator trailer
				1	0 - 100 KW
				2	greater than 100 KW
			17		Water trailer
				1	1-1000 gallons
				2	1001- 5000 gallons
				3	greater than 5000 gallons
			18		Engineer equipment
				1	Mine clearing line charge
				2	Dozer blade kit
				3	Lane marking system
			19		Heavy equipment transport trailer
			20		Maintenance equipment trailer

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
				1	Welding trailer
				2	Compressor
				3	Tools/parts trailer
			21		Limber
			22		Chemical decontamination trailer
			25		Train-Car
				1	Boxcar
				2	Tanker
				3	Passenger
			26		Train-Caboose
			27		Civilian Vehicle
				1	Sedan
			28		Air Defense / Missile Defense Unit Equipment
				1	SA-2 Guideline SAM System
				1	SA-2 Battery C3 Van
				2	SA-2 Missile Launcher
				3	Fan Song Engagement Radar
				1	Fan Song B
				2	Fan Song C/E
				3	Fan Song F
				2	SA-3 Goa SAM System
				1	SA-3 Battery C3 Van
				2	SA-3 Missile Launcher
				1	Twin-Rail Launcher
				2	Quad-Rail Launcher
				3	Low Blow Engagement Radar
				3	SA-5 Gammon SAM System
				1	SA-5 Battalion C3 Van
				2	SA-5 Missile Launcher
				3	Square Pair Engagement Radar
				4	SA-10 Grumble SAM System
				1	SA-10 Battery C3 Vehicle
				2	SA-10 Missile Launcher
				1	SA-10A Towed TEL (5P85T)
				2	SA-10B SP TEL (5P85S)
				3	Flap Lid Engagement Radar (36N6E)
				1	Flap Lid A Radar (tower mounted)
				2	Flap Lid B (SP vehicle)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
					3 Tomb Stone Radar (SA-10C)
					4 Clam Shell Acquisition Radar
					5 SA-10 Missile Transport/Reload Vehicle
					5 SA-4 Ganef SAM System
					1 SA-4 Battery C3 Vehicle
					2 SA-4 TEL (2P24)
					3 Pat Hand Engagement Radar (1S32M)
					4 SA-4 Missile Transporter/Loader Vehicle (2T6)
					6 SA-6 Gainful SAM System
					1 SA-6 Battery C3 Vehicle
					2 SA-6 TEL
					1 SA-6A TEL (2P25)
					2 SA-6B TEL (9A310M1 w/Fire Dome Radar)
					3 Straight Flush Engagement Radar
					4 SA-6 Missile Transporter/Loader Vehicle
					7 SA-8 Gecko SAM System
					1 SA-8 Battery C3 Vehicle
					2 SA-8 TLAR
					1 SA-8A TLAR
					2 SA-8B TLAR
					3 SA-8 Transloader Vehicle
					8 SA-11 Gadfly SAM System
					1 SA-11 Battery C3 Vehicle (9S470M1)
					2 SA-11 TELAR (9A310M1)
					3 SA-11 Loader/Launcher (9A39M1)
					9 SA-12 Gladiator/Giant SAM System (S-300V)
					1 Battalion
					1 Battalion Command Post Vehicle (9S457-1)
					2 Bill Board Acquisition Radar (9S15MT)
					3 High Screen Sector Search Radar (9S19MT)
					2 Battery
					1 Grill Pan Engagement Radar (9S32)
					2 SA-12A Gladiator TELAR (9A83-1)
					3 SA-12B Giant TELAR (9A82)
					4 Gladiator Missile Loader/Launcher (9A85)
					5 Giant Missile Loader/Launcher (9A84)
					6 SA-12B (rail w/SS-24)
					10 SA-15 Gauntlet SAM System
					1 SA-15 Battery C3 Vehicle
					2 SA-15 TELAR
					3 8-Round Missile Reload Vehicle (9T224)
					4 28-Round Missile Reload Transporter (9T225)
					11 SA-17 Grizzly SAM System
					1 SA-17 Command Post Vehicle

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			

- 2 Chair Back Engagement Radar
 - 1 Tracked (SP) Chair Back Vehicle
 - 2 Wheeled (towed) Chair Back Trailer
- 3 SA-17 TELAR
- 4 SA-17 Launcher/Loader Vehicle (TEL)
 - 1 Tracked (SP) LL
 - 2 Wheeled (towed) LL

12 Self-Propelled VSHORAD Gun/Missile System

- 1 ZSU-23/4 Quad 23mm AAA
- 2 SA-9 Gaskin SAM System
 - 1 SA-9A TEL (w/Flat Box-A)
 - 2 SA-9B TEL (w/o Flat Box-A)
- 3 SA-13 Gopher SAM System
 - 1 SA-13 TELAR w/Flat Box B
 - 2 SA-13 TELAR w/o Flat Box
- 4 2S6 "Tunguska" Quad 30mm/SA-19 AD System
- 5 ZSU-57/2 twin-57mm AA Gun System
- 6 BTR-40A w/ZPTU-2 twin-14.5mm AA mount
- 7 BTR-152A w/ZPTU-2 twin-14.5mm AA mount
- 8 BTR-152D w/ZPU-2 twin-14.5mm AA mount
- 9 BTR-152 w/ZU-23 twin-23mm AA mount
- 10 BTR-152 w/M53 quad-12.7mm MG mount

13 Towed VSHORAD Gun/Missile System

- 1 KS-30 130mm AA Gun
- 2 KS-19 100mm AA Gun
- 3 KS-12 85mm AA Gun
- 4 S-60 57mm AA Gun
- 5 M1939 37mm AA Gun
- 6 ZU-23 twin 23mm AA Gun
- 7 14.5mm ZPU AA MG
 - 1 ZPU-1
 - 2 ZPU-2
 - 3 ZPU-4

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	222			
			29		Command, Control, Communications and Intelligence (C3I) System
			30		Operations Facility
			31		Intelligence Facility
			32		Surveillance Facility
			33		Communications Facility
			34		Command Facility
			35		C4I Facility
			36		Control Facility
			37		Fire Control Facility
			38		Missile Defense Facility
			39		Field Command Post
			40		Observation Post

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	222			

1 Fighter/Air Defense

1 MiG-31 Foxhound

- 1 MiG-31 Foxhound-A
- 2 MiG-31M Foxhound-B

2 MiG-29 Fulcrum

- 1 MiG-29 Fulcrum A
- 2 MiG-29UB Fulcrum B
- 3 MiG-29 Fulcrum C
- 4 MiG-29K Fulcrum D
- 5 MiG-29M advanced version
- 6 MiG-29 thrust vectoring
- 7 MiG-29KU ship-based trainer

3 Su-27 Flanker

- 1 Su-27 Flanker A prototypes
- 2 Su-27 Flanker B production
- 3 Su-27UB Flanker C
- 4 Su-27K Flanker D
- 5 Su-27IB

4 MiG-25 Foxbat

- 1 MiG-25P Foxbat A
- 2 MiG-25RB Foxbat B
- 3 MiG-25RBV Foxbat B
- 4 MiG-25BBT Foxbat B
- 5 MiG-25R Foxbat B
- 6 MiG-25PU Foxbat C
- 7 MiG-25RU Foxbat C
- 8 MiG-25U Foxbat C
- 9 MiG-25RBK Foxbat D
- 10 MiG-25RBS Foxbat D
- 11 MiG-25RBSH Foxbat D
- 12 MiG-25RBF Foxbat D
- 13 MiG-25PD Foxbat E
- 14 MiG-25PDS Foxbat E
- 15 MiG-25BM Foxbat F

5 MiG-23/24 Flogger

- 1 MiG-23M Flogger B
- 2 MiG-23MF Flogger B
- 3 MiG-23UB Flogger C
- 4 MiG-23UM Flogger C
- 5 MiG-23MF Flogger E
- 6 MiG-23MS Flogger E
- 7 MiG-23BN Flogger F
- 8 MiG-23BM Flogger F
- 9 MiG-23B Flogger F
- 10 MiG-23ML Flogger G
- 11 MiG-23P Flogger G
- 12 MiG-23BK Flogger H

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	222			
					13 MiG-23BN Flogger H
					14 MiG-23MLD Flogger K
					15 MiG-24 (export MiG-23)
				6	MiG-21 Fishbed/Mongol
					1 MiG-21F Fishbed C
					2 MiG-21PF Fishbed D
					3 MiG-21PFM Fishbed F
					4 MiG-21R Fishbed H
					5 MiG-21S Fishbed H
					6 MiG-21RF Fishbed H
					7 MiG-21SM Fishbed J
					8 MiG-21M (Type 96/Hindustan Aeronautics-India)
					9 MiG-21PFMA Fishbed J
					10 MiG-21MF Fishbed J
					11 MiG-21SMT Fishbed K
					12 MiG-21SMB Fishbed K
					13 MiG-21bis-A Fishbed L
					14 MiG-21bis-B Fishbed N
					15 MiG-21U Mongol A
					16 MiG-21US Mongol B
					17 MiG-21UM Mongol B
				14	MiG-19 Farmer
				15	MiG-17 Fresco
				16	MiG15 Fagot
				2	Attack/Strike
				1	MiG-27 Flogger
					1 MiG-27 Flogger D
					2 MiG-27K Flogger D
					3 MiG-27D Flogger J
					4 MiG-27M (Bahadur-India)
				4	Su-17 Fitter
					1 Su-17 (S-32, Fitter C)
					2 Su-17M (S-32M, Fitter C)
					3 Su-17R Fitter C
					4 Su-17M-2/M-2D (S-32M2, Fitter D)
					5 Su-17UM-2D (U-32, Fitter E)
					6 Su-17UM-3 Fitter G
					7 Su-17M-3 (S-52, Fitter H)
					8 Su-17-1/M-2 Fitter H
					9 Su-17M-4 (S-54, Fitter K)
				5	Su-20 Fitter C (Export Su-17)
					1 Su-20 (S32Mk, Fitter-C)
					2 Su-20R

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	222			

6 Su-22 Fitter

- 1 Su-22U Fitter E
- 2 Su-22 Fitter F
- 3 Su-22UM-3K Fitter G
- 4 Su-22 Fitter G
- 5 Su-22M-3 Fitter J
- 6 Su-22M-4 Fitter K

7 Su-24 Fencer

- 1 Su-24 Fencer B
- 2 Su-24 Fencer C
- 3 Su-24MK Fencer D
- 4 Su-24MR Fencer E
- 5 Su-24MP Fencer F

8 Su-25 Frogfoot

- 1 Su-25 Frogfoot A
- 2 Su-25UB Frogfoot B
- 3 Su-25K (export "A")
- 4 Su-25UBK (export "UB")
- 5 Su-25UT Frogfoot B
- 6 Su-25UTG (tailhook)
- 7 Su-25T (Su-34) (antitank)
- 8 Su-25BM (target towing)

9 Su-37 multirole fighter

10 Yak-38 Forger

- 1 Yak-38 Forger A
- 2 Yak-38 Forger B

11 Su-35

12 Su-7 Fitter A

3 Bomber

1 Tu-160 Blackjack

2 Tu-16 Badger

- 1 Tu-16A Badger A
- 2 Tu-16N Badger A, tanker
- 3 Tu-16T Badger A, torpedo
- 4 Tu-16KS-1 Badger B
- 5 Tu-16 Korvet, Search and Rescue (SAR)
- 6 Tu-16 K-10 Badger C
- 7 Tu-16R Badger D
- 8 Tu-16 Badger E, photo reconnaissance
- 9 Tu-16R Badger F, ELINT
- 10 Tu-16 Badger-G, ASM carrier
- 11 Tu-16K Badger G Mod
- 12 Tu-16PP Badger H, chaff dispenser

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	222			13 Tu-16PP Badger J, ECM 14 Tu-16R Badger K, reconnaissance 15 Tu-16 Badger L, EW
				3	Tu-26 (Tu-22M) Backfire 1 Tu-22M-1 Backfire A 2 Tu-22M-2 Backfire B 3 Tu-22M-3 Backfire C
				4	Tu-22 Blinder 1 Tu-22 Blinder-A 2 Tu-22 Blinder-B 3 Tu-22 Blinder-C, reconnaissance 4 Tu-22U Blinder-D 5 Tu-22 Blinder-E, EW/reconnaissance
				5	Tu-95 or Tu-142 Bear 1 Tu-95 Bear D, sea reconnaissance 2 Tu-95 Bear E ("A" conversion) 3 Tu-95 Bear G ("B/C" ELINT conversion) 4 Tu-95MS Bear H 5 Tu-142 Bear F, ASW 6 Tu-142 Bear F Mod 1 7 Tu-142M Bear F Mod 2 8 Tu-142 Bear F Mod 3 9 Tu-142 Bear F Mod 4 10 Tu-142 Bear J, VLF Communications 11 Tu-142K Bear H
				4	Cargo/Tanker
				1	An-124 Condor 1 An-124
				2	An-22 Cock 1 An-22
				3	Il-76 Candid 1 Il-76 Candid A 2 Il-76T Candid A, civil reserve 3 Il-76M Candid B 4 Il-76TD Candid A, civil reserve 5 Il-76MD Candid B
				4	Il-20/22 Coot 1 Il-20 Coot A, ELINT/recon (Il-18 variant) 2 Il-22 Coot B
				5	An-12 Cub 1 An-12BP 2 An-12A Cub A, ELINT 3 An-12B Cub B, SNA ELINT 4 An-12C Cub C, SNA ECM

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	222			5 An-12D Cub D, SNA ECM
					6 An-24 Coke
					1 An-24
					7 An-26 Curl
					1 An-26 Curl A, manual
					2 An-26B Curl A, pallets
					3 An-26 Curl B, SIGINT
					8 An-32 Cline
					1 An-32
					2 An-32 Sutlej (India)
					9 An-70T
					1 An-70T
					10 An-72 Coaler
					1 An-72
					11 An-225 Cossack
					1 An-225
					12 Il-78 Midas
					1 Il-78 (tanker)
					13 An-2 Colt
					1 An-2 biplane
					5 Antisubmarine/patrol/observation
					1 Il-38 May
					1 Il-38
					2 Be-12 Mail
					1 Be-12
					3 Be-42 Mermaid
					1 Be-42
					5 A-40 Albatross
					1 A-40
					8 Surveillance/C ²
					1 A-50 Mainstay
					1 A-50 AEW&C
					2 An-74 Madcap
					1 An-74
					3 TU-126 Moss
					1 Tu-126

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	222			

20 Attack helicopter

1 Mi-28 Havoc

1 Mi-28

2 Mi-24/25/35 Hind

1 Mi-24 Hind A

2 Mi-24 Hind B

3 Mi-24 Hind C

4 Mi-24D Hind D (1st gunship)

5 Mi-24W Hind E

6 Mi-24P Hind F

7 Mi-24RSH Hind G1 (NBC armored)

8 Mi-24RSH Hind G2 (reconnaissance/spotter)

9 Mi-25 (export Mi-24D)

10 Mi-35 (export Mi-24W)

11 Mi-35P (export Mi-24P)

3 Ka-50 Hokum

1 Ka-50 Hokum A close air support

2 Ka-50 Hokum B tandem trainer

4 Ka-25 Hormone

1 Ka-25BSh Hormone A, ASW

2 Ka-25 Hormone B (targeting & missile guidance)

3 Ka-25PS Hormone C (targeting & missile guidance)

4 Ka-25PL Hormone A

5 Ka-25TS Hormone B

21 Utility helicopter

1 Mi-8/9/17/171 Hip

1 Mi-8 Hip C (assault)

2 Mi-8 Hip D (airborne communications)

3 Mi-8 Hip E "C" development, 12.7

4 Mi-8TBK (Mi-17) ("E" uprated)

5 Mi-8 Hip F ("E" export)

6 Mi-8 Hip J (ECM)

7 Mi-8PP Hip K (ECM)

8 Mi-9 Hip G (special duty & airborne communications)

9 Mi-17 Hip H (MI-8 update)

10 Mi-17P (Hip K derivative)

11 Mi-171 Hip H (hospital)

12 Mi-17 (EW)

2 Mi-14 Haze

1 Mi-14PL Haze A (ASW)

2 Mi-14PW (Polish Mi-14PL)

3 Mi-14BT Haze B (MCM)

4 Mi-14PS Haze C (SAR)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	222			
				3	Mi-26 Halo
				1	Mi-26 heavy transport
				2	Mi-26TZ tanker
				3	Mi-26 communications & support
				4	Mi-6 Hook
				1	Mi-6 Hook A (export)
				2	Mi-6 Hook B (command support)
				3	Mi-6 Hook C ("B" development, command support)
				5	Mi-2 Hoplite
				1	Mi-2 (only mfg in Poland)
				6	Mi-4 Hound
				1	Mi-4
				7	Mi-10 Harke
				1	Mi-10
				2	Mi-10K
				9	Ka-27/28/29 Helix
				1	Ka-27PL Helix A (ASW)
				2	Ka-27PS Helix D (SAR)
				3	Ka-28 Helix A (export Ka-27PL)
				4	Ka-29TB Helix B (EW & assault)
				10	Mi-34 Hermit
				1	Mi-34 (1 engine)
				2	Mi-34V (2 engine)
				11	Mi-38
				1	Mi-38 (2 turbine, replaces Mi-8/17)
				12	Ka-26/126 Hoodlum
				1	Ka-26 Hoodlum A (reciprocating)
				2	Ka-126 Hoodlum B (turbine)
				40	Trainer
				1	Tu-134 Crusty
				1	Tu-134UBL (bomber pilot)
				2	Tu-134Bsh (bomber navigator)
				2	Yak-18 Max
				57	Non-Combatant Commercial Aircraft
				2	Passenger Airliner
				1	Tupolev TU-154 Careless
				1	Tupolev TU-154M Careless
				2	Ilyushin IL-62 Classic
				3	Yakovlev Yak-42 Clobber

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222	1	Carrier	
			3	Kuznetsov class (CV)	
			1	Admiral Kuznetsov (ex-Tbilisi, ex-Leonid Brezhnev)	
			2	Varyag (ex-Riga)	
			4	Modified Kiev class (CV)	
			1	Admiral Gorshkov (ex-Baku)	
			3	Guided-missile Cruiser	
			1	Slava class (CG)	
			1	Slava	
			2	Marshal Ustinov	
			3	Chervona Ukraina	
			4	Vilna Ukraina	
			2	Kirov class	
			1	Admiral Ushakov	
			2	Admiral Lazarev	
			3	Admiral Nakimov	
			4	Peter Velikiy	
			3	Kara class	
			2	Ochakov	
			3	Kerch	
			4	Azov	
			5	Petropavlovsk	
			7	Vladivostok (ex-Tallinn)	
			5	Kresta I class	
			1	Admiral Zozulya	
			6	Kynda class	
			1	Grozny	
			2	Admiral Fokin	
			3	Admiral Golovko	
			4	Guided-missile Destroyer	
			1	Udaloy class	
			1	Udaloy	
			2	Vitse Admiral Kulakov	
			3	Marshal Vasilevsky	
			5	Admiral Spiridonov	
			7	Marshal Shaposhnikov	
			8	Simferopol (ex-Marshal Buokenny)	
			9	Admiral Levchenko	
			10	Admiral Vinogradov	
			11	Admiral Kharlamov	
			12	Admiral Panteleyev	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
				2	Sovremennyy class
				1	Sovremennyy
				2	Otchayannyy
				3	Otlichnny
				4	Osmotritelny
				5	Bezuprechny
				6	Boyevoy
				7	Stoyky
				8	Okrylenny
				9	Burny
				10	Gremyashchy
				11	Bystry
				12	Rastoropny
				13	Bezboyaznenny
				14	Bezuderzhny
				15	Bespokoiny
				16	Nastoichivyy
				17	Besstrashnyy
				18	Vazhnyy
				19	Udumchivyy
				3	Modified Kashin class
				3	Sderzhandoyy
				4	Kashin class
				2	Krasnyy Kavkaz
				3	Krasnyy Krym
				8	Skoryy
				9	Smetlivyy
				5	Udaloy II
				1	Admiral Chabenenko
				8	SAM Kotlin class
				1	Bravyy
				2	Nakhodchivyy
				3	Nastochivyy
				4	Hesokrushimyy
				5	Skromnyy
				6	Skrytnyy
				7	Soznatel'nyy
				8	Vozbuzhdennyy
				6	Guided-missile Frigate (includes Corvette)
				1	Krivak I class
				1	Bditelny
				2	Bezukuriznenny
				3	Bezzavetny
				4	Bodry
				5	Deyatelny
				6	Doblestny

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			<ul style="list-style-type: none"> 7 Dostoyny 8 Druzhny 9 Ladny 10 Legky 12 Letuchy 14 Razumny 15 Razyashchiy 16 Retivy 17 Silnyy 18 Storozhevoy 19 Svirepyy 20 Zadorny 21 Zharky 22 Pylky 23 Poryvisty
					<ul style="list-style-type: none"> 2 Krivak II class <ul style="list-style-type: none"> 1 Bessmenny 2 Gordelivy 3 Gromky 4 Grozyashchy 5 Neukrotimy 6 Pitlivy 7 Razitelny 8 Revnosttny 9 Rezky 10 Rezvy 11 Ryanny
					<ul style="list-style-type: none"> 4 Neustrashimy class (FFG) <ul style="list-style-type: none"> 1 Neustrashimy 2 Nepristupnyy
					<ul style="list-style-type: none"> 5 Tarantul I class (Corvette)
					<ul style="list-style-type: none"> 6 Tarantul II class (Corvette)
					<ul style="list-style-type: none"> 7 Nanuchka I class (Corvette) <ul style="list-style-type: none"> 1 Grad 2 Raduga 3 Suval 4 Storm 5 Taifun 6 Zyklon 7 Metl 8 Zarnitsa 9 Grom 10 Molnija 11 Musson 12 Vichr 13 Bora 14 Briz

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

8 Nanuchka III class (Corvette)

- 1 Meteor
- 2 Zyb
- 3 Tucha
- 4 Priliv Burun
- 5 Uragan
- 6 Liven
- 7 Passat
- 8 Priboy Zarya
- 9 Smerch
- 10 Miras
- 11 Grosa
- 12 Shtyl
- 13 Veter

9 Nanuchka IV class (Corvette)

10 Tarantul III class (Corvette)

11 Gepard Class

- 1 Gepard

12 Nanuchka II class (Corvette)

7 Light/Patrol craft

1 2/3 T 58 PGF/PGR class (patrol)

2 Dergach class (light missile force)

- 1 Sivuch

3 OSA I class

4 OSA II class

5 Poti class (fast attack craft--patrol)

6 Svetlyak class (fast attack craft--patrol)

7 Pauk I class (fast attack craft--patrol)

8 Zhuk class

9 Yaz class

10 Stenka class

11 Piyavka class (river patrol craft)

12 SO 1 class

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
				13	Shmel class (river patrol craft)
				14	TR 40 class (river patrol craft)
				15	Command ship (river patrol craft)
				1	SSV-10
				16	Potok class (torpedo experimental ships)
				1	OS-100
				2	OS-138
				3	OS-145
				4	OS-225
				17	Shelon class (torpedo operating/patrol & target craft)
				18	Poluchat I/II/III classes (torpedo operating/patrol & target craft)
				19	Pozharny I class
				20	Iva class (fire/patrol craft)
				1	PZHK 415
				2	1514
				3	1544
				4	1547
				5	1859
				21	Vikhr class
				22	Vosh class (river patrol craft)
				23	Shershen class
				24	Komar class
				25	Matka class
				8	Mine Countermeasure Ship / Craft
				1	Alesha Class
				1	Pripyat
				2	Vychegda
				3	Pechora
				2	Natya I class
				1	Dizelist
				2	Miner
				3	Starshkiy
				4	Snaypr
				5	Elektrik
				6	Motorist
				7	Signalshik
				8	Turbinist
				9	Polemetchiz

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

- 10 Rulevoy
- 11 Zapal
- 12 Zenitchik
- 13 Radist
- 14 Dobrotay
- 15 Zaryad

3 Natya II class

4 Yurka class

- 1 Gafel
- 2 Evgeniy Nikonov
- 3 Mazlov
- 4 Navodchik
- 5 Semen Rosal

5 T-43 class

6 Sonya class

7 Baltika class

8 Vanya I class

9 Vanya II class

10 Sasha class

11 Yevgenya class

12 Pelikan class ACV (minesweeper, inshore)

13 Lida class (minehunter, inshore)

14 Ilyusha class (minesweeper, inshore)

16 Olya class (minesweeper, inshore)

17 Tanya class (minesweeper, inshore)

18 K 8 class (minesweeping boat)

19 Gorya class (minehunter, ocean)

- 1 Zheleznyakov

9 Dock landing ship

1 Ivan Rogov class

- 1 Ivan Rogov
- 2 Aleksandr Nikolay
- 3 Mitrofan Moskalenko

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

10 Tank landing ship

1 Ropucha class

- 1 Aleksandr Shabalin
- 2 Constantin Olshanskiy
- 3 Tsesar Kunikov
- 4 Bobruisk

2 Alligator class

- 1 Aleksandr Tortsev
- 2 Donetskij Shakhter
- 3 Krasnaya Presnya
- 4 Krymskiy Kom.
- 5 Nikolay Fil'chenkov
- 6 Nikolay Vilkov
- 7 50 Let Sheftsva Vlksm
- 8 Petr Il'ichyev
- 9 Sergei Lazo
- 10 Tomskiy Kom.
- 11 Ilya Azarov

3 Polnocny class

11 Landing craft

4 Vydra class

5 Ondatra class

13 Cruiser/Helicopter Carrier

1 Moskva class

14 Hydrofoil

3 Matka class (fast attack craft, missile hydrofoil)

5 Mukha class (fast attack craft, patrol hydrofoil)

6 Turya class (fast attack craft, torpedo hydrofoil)

9 Babochka class (fast attack craft, patrol hydrofoil)

10 Muravey class (fast attack craft, patrol hydrofoil)

15 Air cushion/Surface effect

1 Pomornik class (air-cushion vehicles)

2 Aist class (air-cushion vehicles)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

3 Tsaplya class (air-cushion vehicles)

4 Lebed class (air-cushion vehicles)

5 Utenok class (air-cushion vehicles)

6 Gus class (air-cushion vehicles)

7 Utka class (wing-in-ground-effect craft) (air cushion)

8 Orlan class (wing-in-ground-effect craft) (air cushion)

16 Auxiliary

1 Ugra class (submarine depot ships)

- 1 Ivan Kolyshkin
- 2 Ivan Vakhrameev
- 3 Volga
- 4 Ivan Kucherenko
- 6 Lentra

2 Don class (submarine depot ships)

- 1 Dmitry Galkin
- 2 Kamchatsky Kkomsomolets
- 3 Magomet Gadzhiev (ex-Mikhail Tukhachevsky)
- 4 Viktor Kotelnikov
- 5 Fedor Vidyayev
- 6 Magadansky Komsomolets

3 Aleksandr Brykin class (missile support ship)

- 1 Aleksandr Brykin

4 Amga class (missile support ships)

- 1 Amga
- 2 Vetluga
- 3 Daugava

5 Malina class (nuclear submarine support ships)

- 1 PM 63
- 2 PM 74
- 3 PM 12

6 Pinega class (nuclear submarine support ships)

- 1 Pinega
- 2 Amur

7 Lama class (missile support ships)

- 1 General Ryabakov
- 2 Voronesh
- 3 PM 44
- 4 PM 93
- 5 PM 131

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

6 PM 150

7 PM 154

8 Modified Andizhan class (missile support ships)

1 Venta

2 Vilyuy

9 Amur I Class (Repair Ship)

1 PM 9

2 PM 10

3 PM 15

4 PM 37

5 PM 49

6 PM 52

7 PM 56

8 PM 75

9 PM 94

10 PM 138

11 PM 161

12 PM 163

13 5

14 30

15 34

16 40

17 64

18 73

19 81

20 82

21 129

22 139

23 140

24 156

10 Amur II Class (repair ship)

1 59

2 69

3 86

4 92

5 97

11 Oskol class (repair ships)

1 PM 2

2 PM 24

3 PM 26

4 PM 42

5 PM 147

6 PM 148

7 20

8 21

9 51

10 68

11 146

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

12 Tomba class (support ships)

- 1 244
- 2 254
- 3 348
- 4 357

13 Vytegrales class (support & depot)

- 1 Apsheron (ex-Vagales)
- 2 Baskunchak (ex-Kirishi)
- 3 Dauriya (ex-Vyborgles)
- 4 Dikson (ex-Vostok 3)
- 5 Donbas (ex-Vostok 4)
- 6 Sevan (ex-Siverles)
- 7 Taman (ex-Suzdal)
- 8 Yamal (ex-Tosnoles)

14 Vishnya class (AGIs)

- 1 SSV 169
- 2 SSV 175
- 3 SSV 201
- 4 SSV 208
- 5 SSV 231
- 6 SSV 520
- 7 SSV 535

15 Balzam class (AGIs)

- 1 SSV 80
- 2 SSV 493
- 3 SSV 516
- 4 SSV 571

16 Primorye class (AGIs)

- 1 SSV 464 Zabaykalye
- 2 SSV 465 Primorye
- 3 SSV 501 Zaporozhye
- 4 SSV 502 Zakarpatye
- 5 SSV 590 Krym
- 6 SSV 591 Kavkaz

17 Nikolay Zubov class (AGIs)

- 1 SSV 468 Gavril Sarychev (mod)
- 2 SSV 469 Semen Chelyuskin
- 3 SSV 503 Khariton Laptev (mod)

18 Modified Pamir class (AGIs)

- 1 SSV 477 Peleng (ex-Arban)

19 Moma class (AGIs)

- 1 Ekvator
- 2 Yupiter (mod)
- 3 Kildin (mod)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			<ul style="list-style-type: none"> 4 SSV 472 (ex-Ilmen) (mod) 5 SSV 474 (ex-Vega) (mod) 6 SSV 506 (ex-Nakhodka) 7 SSV 509 (ex-Pelorus) (mod) 8 SSV 512 (ex-Arkhipelag) (mod) 9 SSV 514 (ex-Seliger) (mod)
					<p>20 Alpinist class (AGIs)</p> <ul style="list-style-type: none"> 1 GS 7 (mod) 2 GS 8 3 GS 19 (mod) 4 GS 39 (mod)
					<p>21 Mayak class</p> <ul style="list-style-type: none"> 1 Khersones 2 Kurs 3 Kursograf 4 Ladoga 5 GS 239 6 GS 242 7 Girorulevoy 8 Aneroid
					<p>22 Okean class (AGIs)</p> <ul style="list-style-type: none"> 4 Ekholot 5 Krenometr 6 Linza (mod) 7 Lotlin (mod) 8 Reduktor (mod) 9 Repiter 10 Teodolit 11 Traverz 12 Zond (mod) no missiles
					<p>23 Lentra class (AGIs)</p> <ul style="list-style-type: none"> 1 GS 41 2 GS 43 (mod) 3 GS 55 4 GS 59
					<p>24 Akademik Krylov class (naval research)</p> <ul style="list-style-type: none"> 1 Admiral Vladimirsky 2 Ivan Kruzenshtern 3 Leonid Demin 4 Akademik Krylov 5 Leonid Sobolev 6 Mikhail Krupsky
					<p>25 Abkhaziya class (naval research)</p> <ul style="list-style-type: none"> 1 Abkhaziya 2 Adzhariya 3 Bashkiriya 4 Moldavia

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

- 26 Polyus class (Kovel type) (naval research)
 - 1 Baykal (mod)
 - 2 Balkhash (mod)
 - 3 Polyus

- 27 Modified Dobrynya Nikitich class (naval research)
 - 1 Vladimir Kavraysky

- 28 Nikolay Zubov class (naval research)
 - 1 Aleksey Chirikov
 - 2 Fedor Litke
 - 3 Andrey Vilkitsky
 - 4 Nikolay Zubov
 - 5 Boris Davidov
 - 6 Semen Dezhnev
 - 7 Faddey Bellingsausen
 - 8 Vasily Golovnin

- 29 Yug class (naval research)
 - 1 V Adm Vorontsov (ex-Briz)
 - 2 Donuzlav
 - 3 Gals
 - 4 Hidrolog
 - 5 Gorizont
 - 6 Mangyshlak
 - 7 Marshal Gelovani
 - 8 Nikolay Matusevich
 - 9 Pegas
 - 10 Persey
 - 11 Pluton
 - 12 Senezh
 - 13 Strelets
 - 14 Tayga
 - 15 Vizir
 - 16 Zodiak
 - 17 Stvor
 - 18 704 (ex-SSV 328)

- 30 Mod Sorum class (naval research)
 - 1 OS 572

- 31 Moma class (+9 AGIs) (naval survey)
 - 1 Altair
 - 2 Anadyr
 - 3 Andromeda
 - 4 Antares
 - 5 Antarktyda
 - 6 Arktika
 - 7 Askold
 - 8 Berezan
 - 9 Cheleken

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
					10 Elton
					11 Kolguev (mod)
					12 Krilon
					13 Liman
					14 Mars
					15 Morzhovets
					16 Okean
					17 Rybachi (mod)
					18 Sever
					19 Taymyr
					20 Zapolyarye
				32	Samara class (naval survey)
					1 Azimut
					2 Glubomer
					3 Tropik
					4 Deviator
					5 Gradus
					6 Vostok
					7 Gigrometr
					8 Kompas
					9 Vaygach (mod)
					10 Moskovsky Universitet
					11 Pamyat Merkuryia
					12 Zenit (ex-Gorizont) (mod)
					13 Rumb
				33	Finik class (naval survey)
					1 GS 44
					2 47
					3 84
					4 86
					5 87
					6 260
					7 265
					8 270
					9 272
					10 278
					11 296
					12 297
					13 301
					14 388
					15 392
					16 397
					17 398
					18 399
					19 400
					20 401
					21 402
					22 403
					23 404
					24 405

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
				34	Biya class (naval survey)
				1	GS 182
				2	193
				3	194
				4	198
				5	200
				6	202
				7	204
				8	206
				9	210
				10	212
				11	214
				12	271
				13	273
				14	275
				35	Kamenka class (naval survey)
				1	GS 66
				2	74
				3	78
				4	82
				5	107
				6	108 (ex-Vernier)
				7	113 (ex-Belbeck)
				8	118
				9	199 (ex-Sima)
				10	207
				11	211
				12	Astronom (mod)
				36	Vinograd class (naval survey)
				1	GS 525
				2	GS 526
				37	Melitopol class (naval survey)
				1	Mayak
				2	Nivelir
				3	Prizma
				4	Indigurka (mod)
				5	Shevchenoko (mod)
				38	Nyryat 1 class (naval survey)
				39	Nyryat 2 class (naval survey)
				40	Sibir class (naval missile range)
				1	Sakhalin
				2	Spassk (ex-Suchan)
				41	Marshal Nedelin class (naval missile range)
				1	Marshal Nedelin
				2	Marshal Krylov

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			3 Akademik Nicolai Pilyugin
					42 Kamchatka class (AG) (naval missile range)
					1 SSV 391 Kamchatka
					43 Kapusta class (naval missile range)
					1 SSV 33 Ural
					44 Ugra II class (AXT) (training)
					1 Borodino
					2 Gangut
					45 Smolny class (AXT) (training)
					1 Khasan
					2 Perekop
					3 Smolny
					46 Wodnik II class (AXT) (training)
					1 Luga
					2 Oka
					47 Sail training ships
					1 Mir
					2 Druzjba
					3 Khersones
					4 Pallada
					48 Klasma class (cable ships)
					1 Donets
					2 Ingul
					3 Inguri
					4 Katun
					5 Tavda
					6 Tsna
					7 Yana type I
					8 Zeya
					49 Emba I class (cable ships)
					1 Emba
					2 Nepryadvá
					3 Setun
					50 Emba II class (cable ships)
					1 Birusa
					2 Kemj
					51 Berezina class (replenishment ships)
					1 Berezina
					52 Boris Chilikin class (replenishment ships)
					1 Boris Butoma
					2 Genrich Gasanov
					3 Boris Chilikin

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			4 Ivan Bubnov 5 Dnestr 6 Vladimir Kolechitsky
					53 Dubna class (replenishment tankers) 1 Dubna 2 Pechenga 3 Irkut 4 Sventa
					54 Mod Kazbek class (replenishment tankers) 1 Alaty 2 Desna 3 Volkhov
					55 Mod Altay class (replenishment tankers) 1 Elnya 2 Ilim 3 Izhora 4 Kola 5 Prut 6 Yegorlik
					56 Uda class (replenishment tankers) 1 Dunay (mod) 2 Koida 3 Lena (mod) 4 Terek (mod) 5 Vishera
					57 Olekma class (replenishment tankers) 1 Olekma (mod) 2 Iman 3 Zolotoy rog
					58 Kaliningradneft class (support tankers) 1 Argun 2 Vyazma
					59 Sofya class (support tanker) 1 Akhtyuba (ex-Hanoi)
					60 Nercha class (support tankers) 1 Nara 2 Nercha
					61 Konda class (support tankers) 1 Konda 2 Rossosh 3 Soyana 4 Yakhroma

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
				62	Khobi class (support tankers)
					1 Cheremshan
					2 Orsha
					3 Shelon
					4 Tartu
					5 Khobi
					6 Seima
					7 Sosva
					8 Titan 150
					9 Lovat
					10 Shacha
					11 Sysola
					12 Tunguska
					13 Metan
				63	Irtysh class (support tanker)
					1 Narva
				64	Baskunchak class (support tankers)
					1 Ivan Golubets
					2 Sovietsky Pogranichnik
				65	Luza class (special tankers)
					1 Alambai
					2 Barguzin
					3 Kama
					4 Aragvi
					5 Don
					6 Selenga
				66	Vala class (special tankers)
					1 Vala
					2 TNT 11
					3 TNT 27
					4 12
					5 19
					6 25
					7 29
				67	OB class (AH)
					1 OB
					2 Yenisei
					3 Svir
					4 Irtysh
				68	Mikhail Rudnitsky class (ARs)
					1 Mikhail Rudnitsky
					2 Georgy Kozmin
					3 Georgy Titov
					4 Sayany

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
					69 Pamir class (salvage, rescue & mooring)
					1 Agatan
					2 Aldan
					70 Ingul class (salvage, rescue & mooring)
					1 Pamir
					2 Mashuk
					3 Alatau
					4 Karakh
					71 Sliva class (salvage, rescue & mooring)
					1 SB 406
					2 SB 408
					3 SB 921
					4 SB 922 Shakhter
					72 Kashtan class (buoy tenders)
					1 KIL 926
					2 KIL 143
					3 KIL 164
					4 KIL 498
					5 KIL 927
					6 KIL 158
					7 KIL 140
					8 KIL 168
					73 Sura class (buoy tenders)
					1 KIL 1
					2 2
					3 21
					4 22
					5 25
					6 27
					7 29
					8 31
					9 32
					10 33
					74 Orel class (salvage tugs)
					1 SB 38
					2 SB 43
					75 Katun I class (salvage & rescue tugs)
					1 PZHS 96
					2 98
					3 123
					4 124
					5 209
					6 273
					7 279
					8 282
					9 551

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

76 Katun II (salvage & rescue tugs)

- 1 PZHS 64
- 2 92

77 Neptun class (salvage, rescue & mooring)

- 1 KIL 3
- 2 6
- 3 7
- 4 9
- 5 11
- 6 13
- 7 15
- 8 17
- 9 18

78 Elbrus class (submarine rescue ships)

- 1 Elbrus
- 2 Alagez

79 Nepa class (submarine rescue ships)

- 1 Karpaty

80 Prut class (submarine rescue ships)

- 1 Altay
- 2 Beshtau
- 3 Vladimir Trefolev
- 4 Zhiguli
- 5 SS 21
- 6 Epron (ex-SS 26)
- 7 SS 83

81 Valday class (ex-T 58)

- 1 Kazbek
- 2 Khibiny
- 3 Valday
- 4 Zangezur
- 5 Pulkovo (ex-SS 38)
- 6 SS 30
- 7 35
- 8 40
- 9 47
- 10 50

82 Anadyr class (transports)

- 1 Anadyr

83 Angara class (transports)

- 1 Angara (ex-Hela)

84 Amguema class (transports)

- 1 Yauza

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

- 85 Chulym class (transports)
 - 1 Severodonetsk

- 86 Andizan class (transports)
 - 1 Onda
 - 2 Posyet

- 87 Kalinin class (transports)
 - 1 Kuban (ex-Nadeshda-Krupskaya)
- 88 Antonov class (transports)
 - 1 Neon Antonov
 - 2 Irbit
 - 3 Nicolay Starshinov
 - 4 Ivan Lednev
 - 5 Nikolay Sipyagin
 - 6 Ivan Sudtsov
 - 7 Ivan Odtejev
 - 8 Victor Denison
 - 9 Sergey Sudetsky
 - 10 Dvina
 - 11 Mikhail Konovalov

- 89 Partizan class (transports)
 - 1 Pechora
 - 2 Turgay
 - 3 Ufa
 - 4 V Adm Fomin (ex-Pinega) (mod)

- 90 Keyla class (transports)
 - 1 Mezen
 - 2 Onega
 - 3 Ponoï
 - 4 Ritsa (AGI)
 - 5 Teriberka
 - 6 Tuloma
 - 7 Tvertsa
 - 8 Unza
 - 9 Ussury
 - 10 Yeruslan

- 91 Muna class (transports)
 - 1 VTR 28
 - 2 48
 - 3 81
 - 4 82
 - 5 83
 - 6 84
 - 7 85
 - 8 86
 - 9 91
 - 10 92

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

11 93
 12 94
 13 148

92 Mayak class (transports)

1 Buzuluk
 2 Ishim
 3 Lama
 4 Mius
 5 Neman
 6 Rioni
 7 Ulma
 8 Vytegra

93 Lentra class (transports)

1 Alma
 2 Kacha
 3 Ufa
 4 Ugra
 5 VTR 1
 6 28
 7 32
 8 143
 9 144
 10 145

94 MP 4 class (transports)

1 VTR 294
 2 VTR 295

95 MP 6 class (transports)

1 Bira
 2 Vologda

96 Telnovsk class (transports)

1 Burovestnik
 2 Lag
 3 VTR 73
 4 VTR 74 (ex-Jan Kreuks)

97 Khabarov class (transports)

1 VTR 8
 2 13
 3 15
 4 25

98 Komandor class

1 Komandor
 2 Shkiper Gyek
 3 Herluf Bidstrup

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
				99	Omega class
				1	GKS 52
				2	SFP 95
				3	SFP 224
				4	SFP 240
				5	SFP 283
				6	GKS 286
				7	SFP 295
				8	SFP 322
				9	SFP 340
				10	SFP 173
				11	SFP 511
				12	SFP 542
				13	SFP 562
				14	SFP 177
				100	T 43 class
				1	GKS 11
				2	12
				3	14-24
				4	26
				5	45
				104	PO 2 class
				105	Nyryat 2 class
				106	Nyryat 1 class
				107	Petrushka class
				108	Miernyk class
				109	Daldyn class
				1	Daldyn
				110	Yelva class
				1	VM 143
				2	146
				3	154
				4	266
				5	268
				6	413
				7	414
				8	416
				9	420
				10	425
				11	907
				12	909
				111	Bolva (barracks ships)
				1	Bolva 1

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

2 Bolva 2

3 Bolva 3

17 Auxiliary, Merchant Marine

1 Tamyр class (ice breakers)

1 Tamyр

2 Vaygach

2 Arktika class (ice breakers)

1 Arktika

2 Sibir

3 Rossiya

4 Sovetskiy Soyuz

5 Oktyabryskaya Revolutsiya

6 Ural (1996)

3 Yermak class (ice breakers)

1 Yermak

2 Admiral Makarov

3 Krasin

4 Moskva class (ice breakers)

2 Leningrad

4 Murmansk

5 Vladivostok

5 Kapitan Sorokin class (ice breakers)

1 Kapitan Sorokin (mod)

2 Kapitan Nikolayev

3 Kapitan Dranitsyn

4 Kapitan Khlebnikov

6 Mudyug class (ice breakers)

1 Mudyug

2 Magadan

3 Dikson

7 Kapitan Belousov class (ice breakers)

1 Kapitan Belousov

2 Kapitan Melekhov

3 Kapitan Voronin

8 Dobrynya Nikitich class (ice breakers)

1 Afanasy Nikitin (ex-Ledokol 2)

2 Purga (1961)

3 Buran (1966)

4 Sadko (1968)

5 Dobrynya Nikitich (1960)

6 Semen Chelyuskin (ex-Ledokol 8)(1965)

7 Fedor Litke (1970)

8 Georgy Sedov (1967)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

- 9 Semen Dezhnev (1971)
- 10 Ilya Muromets (1966)
- 11 Vasily Poyarkov (ex-Ledokol 4) (1963)
- 12 Ivan Moskvitin (1971)
- 13 Vladimir Rusanov (ex-Ledokol 7) (1964)
- 14 Ivan Kruzenshtern (ex-Ledokol 6) (1964)
- 15 Khariton Laptev (ex-Ledokol 3) (1962)
- 16 Vyuga (1961) (ex-Ledokol 5) (1963)
- 17 P Pakhtusov (1966)
- 18 Peresvet (1969)
- 19 Yerofei Khabarov
- 20 Yury Lisyansky (ex-Ledokol 9) (1965)
- 21 Plug (1961)

9 Kapitan Chechkin class (ice breakers)

- 1 Kapitan Chechkin
- 2 Kapitan Plakhin
- 3 Kapitan Chadayev
- 4 Kapitan Krutov
- 5 Kapitan Bukayev
- 6 Kapitan Zarubin

10 Kapitan Yevdokimov class (ice breakers)

- 1 Kapitan Uevdokimov
- 2 Kapitan Babichev
- 3 Kapitan Chudinov
- 4 Kapitan Borodkin
- 5 Avramiy Zavenyagin (ex-Kapitan Krylov)
- 6 Kapitan Metsayk
- 7 Kapitan Demidov
- 8 Kapitan Moshkin

11 Kapitan Izmaylov class (ice breakers)

- 1 Kapitan M. Izmaylov
- 2 Kapitan Kosolapov
- 3 Kapitan A. Radzabov

12 Stroptivy class (ice breakers)

- 1 Stroptivy
- 2 Stakhanovets
- 3 Sibirsky
- 4 Spravedlivy
- 5 Suvorovets
- 6 Fobos
- 7 Deymos

13 Ivan Susanin class (armed ice breakers)

- 1 Zaisberg
- 2 Neva
- 3 Dunay
- 4 Ruslan
- 5 Imeni XXVI Syezda KPSS

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			6 Volga 7 Ivan Susanin 8 Imeni XXV Syezda KPSS

18 Utility

1 Manych class (water tankers)

- 1 Manych
- 2 Tagil

2 Voda class (water carriers)

- 1 Abakan
- 2 Sura
- 3 MVT 6
- 4 9
- 5 10
- 6 16
- 7 17
- 8 18
- 9 20
- 10 21
- 11 24
- 12 134
- 13 135
- 14 138

3 Pelym class (degaussing ships (YDG))

- 1 SR 70
- 2 SR 111
- 3 SR 179
- 4 SR 180
- 5 SR 191
- 6 SR 203
- 7 SR 215
- 8 SR 218
- 9 SR 221
- 10 SR 222
- 11 SR 233
- 12 SR 241
- 13 SR 276
- 14 SR 280
- 15 SR 281
- 16 SR 407
- 17 SR 409
- 18 SR 455

4 Bereza Class (degaussing ships (YDG))

- 1 SR 28
- 2 SR 59
- 3 SR 74
- 4 SR 120
- 5 SR 137
- 6 SR 188

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			

7 SR 216
8 SR 370
9 SR 478
10 SR 479
11 SR 541
12 SR 548
13 SR 568
14 SR 569
15 SR 570
16 SR 936
17 SR 939

5 Khabarov class (degaussing ships (YDG))

1 Khabarov
2 SR 164

6 Sekstan class

7 Korall class

8 Baklazhan class (tugs)

1 SB 131 Nikolai Chiker
2 SB 135

9 Neftegaz class (tugs)

1 Aleksey Kortunov
2 Ilga
3 Umka
4 Kalar

10 Goryn class (tugs)

1 MB 15
2 MB 119
3 MB 18
4 SB 365 (ex-MB 29)
5 MB 32
6 SB 521 (ex-MB 61)
7 MB 35
8 SB 522 (ex-MB 62)
9 MB 36
10 SB 523 (ex-MB 64)
11 MB 38
12 SB 524 (ex-MB 108)
13 MB 105

11 Sorum class (tugs)

1 Amur
2 Primorye
3 Brest
4 Bug
5 Burya
6 Chukotka

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
					7 Kamchatka
					8 Karelia
					9 Ladoga
					10 Neman
					11 Sakhalin
					12 Ural
					13 Victor Kingsiepp
					14 Yan Berzin
					15 Yenisey
					16 Zabaykalye
					17 Zapolarye
					18 MB 4
					19 MB 6
					20 MB 13
					21 MB 19
					22 MB 25
					23 MB 26
					24 MB 28
					25 MB 30
					26 MB 31
					27 MB 37
					28 MB 56
					29 MB 58
					30 MB 61
					31 MB 76
					32 MB 99
					33 MB 110
					34 MB 147
					35 MB 148
					36 MB 196
					37 MB 236
					38 MB 304
					39 MB 307

12 Okhtensky class (tugs)

- 1 Loksa
- 2 Orion
- 3 Saturn
- 4 Neptun
- 5 Pochetny
- 6 Tyulen

13 Roslavl class (tugs)

- 1 MB 50
- 2 MB 94
- 3 MB 95
- 4 MB 102
- 5 MB 125
- 6 MB 145
- 7 MB 146
- 8 MB 147
- 9 SB 41

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			10 SB 46
					14 Zenit class (tugs)
					15 Scholle class (harbor tugs)
					16 Tugur class (harbor tugs)
					17 Sidehole (1, 2) classes (harbor tugs)
					50 Frigate
					1 Grisha I class
					2 Grisha II class
					1 Ametyst
					2 Brilliant
					3 Izumrud
					4 Predanny
					5 Rubin
					6 Sapfir
					7 Zhemchug
					8 Provorny
					9 Izmail
					10 Dneper
					11 Resitelny
					12 Primerny
					3 Grisha III class
					4 Grisha V class
					5 Mirka II class
					6 Petya I class
					7 Petya II class
					8 Riga class
					9 Krivak III (Zaliv (Kerch))
					1 Menzhinsky
					2 Derzhinsky
					3 Orel
					4 Imeni IXX Letiya Vchk-Kgb
					5 Imeni IXX Letiya Pogranvoysk
					6 Kedrov
					7 Vorovsky
					8 Hetman Dorosenko
					9 Hetman Petr Sagadachny

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	222			
				10	Parchim II Class
				11	Petya III Class
				12	Koni Class
			52		Heavy Cruiser

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	222			
			1		SSBN (Nuclear Ballistic Missile)
				1	Typhoon class
				2	Delta IV class
				3	Delta III class
				4	Delta II class
				5	Delta I class
				6	Yankee I class
				11	Golf II class
			2		SSGN (Nuclear Guided Missile)
				1	Oscar II class
				2	Oscar I class
				3	Charlie II class
				4	Charlie I class
				5	Echo II class
				6	Yankee conversion class
			3		SSN (Nuclear Attack-Torpedo)
				1	Victor III Class
				2	Victor II class
				3	Victor I class
				4	Yankee Notch class
				5	Sierra II class
					1 Orel
					2 Kasatka
				6	Sierra I class
				7	Alfa class
				8	Akula class
					1 Bars
					2 Leopard
					3 Pantera

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	222			4 Puma 5 Volk 6 Tigr
					4 SSG (Conventional Guided Missile)
					1 Juliett Class
					5 SS (Conventional Attack-Torpedo, Patrol)
					1 Kilo class
					2 Tango class
					3 Foxtrot class
					4 Romeo class
					6 SSAN (Nuclear Auxiliary)
					1 Yankee class (ex-SSBN)
					2 Uniform class
					7 SSA (Conventional Auxiliary)
					3 Lima class
					4 Beluga class
					5 X-Ray class
					6 India class
					7 Bravo class (target sub)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	222			

0 Other

1 Astronomical Module

- 1 Kavant 1
- 2 Kavant 2
- 3 Priroda
- 4 Spektrum
- 5 Kristall

1 Manned

1 Space Shuttle

- 1 Buran

2 Space Station

- 1 Mir
- 2 Kvant
- 3 Resurs-F2

3 Space vehicles

- 1 Phobos 2
- 2 Soyuz-TM
- 3 Phobos
- 4 Progress
- 5 Progress-M
- 6 Prognaz
- 7 Vostok
- 8 Molniya
- 9 Cosmos
- 10 Proton K
- 11 Proton KM
- 12 Tsyklon
- 13 Zenit
- 14 Lomonosov (MHB)

2 Unmanned

1 Communication satellite

- 1 Molniya

2 Navigation satellite

- 1 GEO-IK Geodetic Cosmos
- 2 Elektron

3 Early Warning satellite

- 1 Cosmos

4 Electronic Intelligence satellite

- 1 Elints

6 Ocean surveillance satellite

- 1 Okean

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	222			
				2	Eorsats
			8		Optical imaging surveillance satellite
				1	Venera
				2	Generation
			10		Minor military satellite
				1	C2093
				2	C2002
				3	C2059
				4	C2075
				5	C2137
				6	C2164
				7	C1985
				8	C2053
				9	C2106
			11		Illuminating satellite
				1	Reflector
				2	Energia
			12		Microwave activity
				1	Relikt

4.2.3.1.3 U.K. Platforms

All U.K. platforms have a Kind-field value of 1 and a Country-field value of 224.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	224			
			1		Tank
				1	Chieftain MBT
				2	Challenger MBT
					1 Mark I
					2 Mark II
			2		Armored fighting vehicle
				1	FV 432 (APC)
					1 Ambulance
					2 81mm mortar carrier
				2	FV 103 Spartan (APC)
				3	FV 601 Saladin
				4	FV 107 Scimitar
				6	FV 603 Saracen
				7	AT 105 Saxon
				8	FV 510 Warrior
				9	FV 711 Ferret
				10	FV 721 Fox
				12	FV 102 Striker
				13	FV 101 Scorpion
				14	FV 106 Samson
			3		Armored utility vehicle
				1	FV 4204 Chieftain ARV
				2	Challenger ARV
				3	FV 4003 Centurion (MK 5) AVRE
				4	Chieftain AVRE
				5	Combat Engineer tractor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	224			
				6	FV 4205 Chieftain AVLB
				7	Mobile bridge
				1	M2
				2	M3
				8	FV 105 Sultan
				9	FV 104 Samaritan
				10	FV 512 Warrior Repair Vehicle
				11	FV 513 Warrior Recovery Vehicle
			4		Self-propelled artillery
				1	FV 433 Abbot 105-mm Howitzer
				6	Stormer HVM Carrier
			5		Towed artillery
				1	FH-70 155-mm gun
				2	L-118 105-mm
				3	M-56 105-mm
				4	5.5-in/140-mm
			6		Small wheeled utility vehicle
				1	LWB Land Rover
				2	Land Rover 6x6 truck
			7		Large wheeled utility vehicle
				1	4 Tonne
				2	8 Tonne
				3	8 Tonne fuel
				4	14 Tonne
				5	14 Tonne with bridge trailer
			8		Small tracked utility vehicle
			9		Large tracked utility vehicle

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	224			
			10		Mortar
			11		Mine plow
			12		Mine rake
			13		Mine roller
			14		Cargo trailer
				1	0 - 0.5 ton
				2	0.51 - 2 ton
				3	2.01 - 5 ton
				4	5.02 - 10 ton
				5	greater than 10 tons
			15		Fuel trailer
				1	1-1000 gallons
				2	1001 - 5000 gallons
				3	greater than 5000 gallons
			16		Generator trailer
				1	0 - 100 KW
				2	greater than 100 KW
			17		Water trailer
				1	1-1000 gallons
				2	1001- 5000 gallons
				3	greater than 5000 gallons
			18		Engineer equipment
				1	Mine clearing line charge
				2	Dozer blade kit
				3	Lane marking system
			19		Heavy equipment transport trailer

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	224	20		Maintenance equipment trailer
			1		Welding trailer
			2		Compressor
			3		Tools/parts trailer
			21		Limber
			22		Chemical decontamination trailer
			28		Air Defense/Missile Defense Unit Equipment
			1		Rapier SAM System
			1		Rapier Battery Command Post (BCP)
			2		Rapier Launcher
			1		Standard 4-Round Launcher
			2		6-Round Launcher (Darkfire variant)
			3		8-Round Launcher (Rapier 2000/JERNAS)
			4		Tracked Rapier
			3		Blindfire Engagement Radar (DN-181)
			4		Dagger Surveillance Radar (Rapier 2000/JERNAS)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	224			

1 Fighter/Air Defense

1 Tornado ADV

- 1 Tornado F. Mk2
- 2 Tornado F. Mk 2A
- 3 Tornado F. Mk 3

3 Eurofighter 2000

2 Attack/Strike

1 Sea Harrier

- 1 Sea Harrier FRS. Mk 1
- 2 Sea Harrier T. Mk 4
- 3 Sea Harrier FRS. Mk 51

2 Harrier

- 1 Harrier GR. Mk 3
- 2 Harrier T. Mk 4
- 3 Harrier GR. 5
- 4 Harrier GR. 7
- 5 VA.1 Matador (AV-8S & TAV-8S)

3 BAe HS Buccaneer

4 Tornado

- 1 Tornado GR Mk 1
- 2 Tornado GR Mk 1A
- 3 Tornado GR Mk 4

5 Jaguar

- 1 Jaguar GR1 Mk 1
- 2 Jaguar GR1 Mk 1A

6 BAe Hawk

- 1 Hawk T Mk 1
- 2 Hawk T Mk 1A

4 Cargo/Tanker

1 K-2 Victor

2 Hercules C130

- 1 Hercules C. Mk 1
- 2 Hercules C. Mk 1P
- 3 Hercules C. MK 1K
- 4 Hercules C. Mk 3P

3 BAe 146

- 1 BAe 146 CC. Mk 2

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	224			
				5	Sea Devon
				6	Sea Heron
				7	V-22 Osprey
				8	BAe (BAC/Vickers) VC-10
				1	VC-10 C. Mk1(K)
				2	VC-10 K. Mk 2
				3	VC-10 K. Mk 3
				4	VC-10 K. Mk 4
				11	Pilatus Britten-Norman Defender
				1	Islander CC. Mk 2
				2	Islander AL. Mk 1
				3	Maritime Defender
				4	Turbine Defender
				12	Shorts 330 Sherpa
				1	C-23A
				2	C-23B
				3	Shorts 330-UTT
				14	BAe HS 748MF
				1	Andover C. Mk 1
				15	Vickers VC2 Viscount
				16	L-1011 TriStar
				1	TriStar KC Mk 1
				2	TriStar K Mk 1
				3	TriStar C Mk 2
				5	ASW/patrol/observation
				1	Nimrod
				1	Nimrod R Mk 1
				2	Nimrod MR Mk 2
				3	Nimrod MR Mk 2P
				4	Nimrod MR Mk 3
				2	BAe P. 132
				7	Reconnaissance
				1	English Electric Canberra
				1	Canberra PR Mk 7
				2	Canberra PR Mk 9
				2	HS Buccaneer
				1	Buccaneer S. Mk 2A

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	224		3	Tornado
				1	Tornado GR Mk 1 w/recon pod
			8		Surveillance/C ²
				1	E-3D Sentry AEW Mk 1
				2	Andover
				1	Andover C. Mk1
				3	Canberra
				1	B Mk 2
				2	T Mk 4
				3	E Mk 15
				4	E Mk 17
				5	TT Mk 18
				6	TT Mk 22
				4	Hawker Hunter
				1	GA 11
				2	T. Mk 7
				3	T. Mk 8
				4	PR Mk 11
			20		Attack Helicopter
				1	Boeing
				1	WAH64
			21		Utility helicopter
				2	Westland Lynx
				1	Mk 5
				11	Mk 28
				13	Mk 90
				14	Mk 86
				15	Mk 95
				16	Mk 99
				17	AH. Mk1
				18	AH. Mk 7
				19	AH. Mk 9
				8	Westland Wessex
				1	HC.MK 2
				2	HC.MK 5
				9	Scout
				10	Wasp
				18	SA 330

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	224			

19 Westland Super Lynx

- 1 Mk 95
- 2 Mk 99

22 Antisubmarine Warfare / Patrol Helicopter

1 Westland Sea King

- 1 HAS. Mk 1
- 2 HAS. Mk 2
- 3 HAS. Mk 5
- 4 HAS. Mk 6
- 5 AEW. Mk 2A
- 6 HAR. Mk 3
- 7 HAR. Mk 5
- 8 Mk 41
- 9 Mk 42
- 10 Mk 42A
- 11 Mk 42B
- 12 Mk 43
- 13 Mk 43A
- 14 Mk 43B
- 15 Mk 45
- 16 Mk 47
- 17 Mk 48
- 18 Mk 50

2 Westland Lynx (Naval)

- 1 HAS Mk 2
- 2 HAS Mk 3
- 3 HAS Mk 2 (FN)
- 4 HAS Mk 3 (FN)
- 5 Mk 21 (Brazil)
- 6 Mk 23 (Argentina)
- 7 Mk 25 (Netherlands)
- 8 Mk 27 (Netherlands)
- 9 MK 81 (Netherlands)
- 10 MK 80 (Denmark)

3 EH101 Merlin

23 Cargo Helicopter

1 Westland Commando

- 1 Commando Mk 1
- 2 Commando Mk 2
- 3 Commando Mk 2B
- 4 Commando Mk 2E
- 5 Commando Mk 2A
- 6 Commando Mk 2C
- 7 Commando Mk 3
- 8 Indian Sea King Mk 42C
- 9 Sea King HC. Mk

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	224			

40 Trainer

1 Shorts S312 Tucano

1 T. Mk 1

2 Bulldog

1 T. MK 1

3 Chipmunk

5 BAe Hawk

1 Hawk T. Mk 1

2 Hawk T. Mk 1A

3 Goshawk T-45A

6 BAe Jetstream Super 31

1 Jetstream T Mk 2

2 Jetstream T Mk 3

7 Chieftain

8 BAe 125-800

1 C-29A

2 U-125A

9 Slingsby T67 Firefly

1 T67M Mk II

2 T67M260

10 Provost

1 T Mk 5

57 Non-Combatant Commercial Aircraft

1 Passenger Airline

1 British Aerospace 146-100

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			

4 Guided-missile Destroyer

1 Type 42

- 1 D 86 Birmingham
- 2 D 87 Newcastle
- 3 D 88 Glasgow
- 4 D 108 Cardiff
- 5 D 89 Exeter
- 6 D 90 Southampton
- 7 D 91 Nottingham
- 8 D 92 Liverpool
- 9 D 95 Manchester
- 10 D 96 Gloucester
- 11 D 97 Edinburgh
- 12 D 98 York

6 Guided-missile Frigate

1 Duke class (Type 23)

- 1 F 230 Norfolk
- 2 F 231 Argyll
- 3 F 229 Lancaster (ex-F 232)
- 4 F 233 Marlborough
- 5 F 234 Iron Duke
- 6 F 235 Monmouth
- 7 F 236 Montrose
- 8 F 237 Westminster
- 9 F 238 Northumberland
- 10 F 239 Richmond
- 11 F 240 Somerset
- 12 F 241 Grafton
- 13 F 242 Sutherland

2 Broadsword class (Type 22)

- 1 F 88 Broadsword
- 2 F 89 Battleaxe
- 3 F 90 Brilliant
- 4 F 91 Brazen
- 5 F 92 Boxer
- 6 F 93 Beaver
- 7 F 94 Brave
- 8 F 95 London (ex-Bloodhound)
- 9 F 96 Sheffield
- 10 F 98 Coventry
- 11 F 85 Cumberland
- 12 F 86 Campbeltown
- 13 F 87 Chatham
- 14 F 99 Cornwall

3 Amazon class (Type 21)

- 7 F 181 Tariq (Pak.)
- 8 F 182 Babur (Pak.)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			9 F 183 Khaibir (Pak.) 10 F 184 Badr (Pak.) 11 F 185 Shahjahan (Pak.) 12 F 186 Tippu Sultan (Pak.)
					4 Leander Class 5 Condell (Chile) 6 Lynch (Chile) 7 Ministro Zenteno (Chile) 8 General Baquedano (Chile)
					7 Light/patrol craft
					1 Antarctic patrol ship 1 A 176 Polar Circle
					2 Castle class (offshore patrol vessels MK 2) 1 P 258 Leeds Castle 2 Dumbarton Castle
					3 Island class (offshore patrol vessels) 1 P 277 Anglesey 2 P 278 Alderney 3 P 295 Jersey 4 P 297 Guernsey 5 P 298 Shetland 6 P 299 Orkney 7 P 300 Lindisfarne
					4 Peacock class (large patrol craft) 1 P 239 Peacock 2 P 240 Plover 3 P 241 Starling
					5 Bird and Seal class (large patrol craft) 1 P 259 Redpole (ex-Sea Otter) 2 P 260 Kingfisher 3 P 261 Cygnet
					6 Archer class (training and patrol craft) 1 P 264 Archer 2 P 270 Biter 3 P 272 Smiter 4 P 273 Pursuer 5 P 279 Blazer 6 P 280 Dasher 7 P 291 Puncher 8 P 292 Charger 9 P 293 Ranger 10 P 294 Trumpeter 11 A 153 Example (RNXS) 12 A 154 Explorer (RNXS)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			13 A 163 Express (RNXS) 14 A 167 Exploit (RNXS)

8 Mine Countermeasure Ship/Craft

1 Hunt class (minesweepers/minehunters, coastal)

- 1 M 29 Brecon
- 2 M 30 Ledbury
- 3 M 31 Cattistock
- 4 M 32 Cottesmore
- 5 M 33 Brocklesby
- 6 M 34 Middleton
- 7 M 35 Dulverton
- 8 M 36 Bicester
- 9 M 37 Chiddingfold
- 10 M 38 Atherstone
- 11 M 39 Hurworth
- 12 M 40 Berkeley
- 13 M 41 Quorn

2 River class (minesweepers, coastal)

- 1 M 2003 Waveney
- 2 M 2004 Carron
- 3 M 2005 Dovey
- 4 M 2006 Helford
- 5 M 2007 Humber
- 6 M 2008 Blackwater
- 7 M 2009 Itchen
- 8 M 2010 Helmsdale
- 9 M 2011 Orwell
- 10 M2012 Ribble
- 11 M 2013 Spey
- 12 M 2014 Arun

3 Ton class (coastal minehunters)

- 1 M 1114 Brinton
- 2 M 1151 Iveston
- 3 M 1154 Kellington
- 4 M 1166 Nurton
- 5 M 1181 Sheraton

4 Sandown class (minehunters)

- 1 M 101 Sandown
- 2 M 102 Inverness
- 3 M 103 Cromer
- 4 M 104 Walney
- 5 M 105 Bridport

10 Tank landing ship

1 Sir Bedivere Class (LSL)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			

2 Sir Galahad Class (LSL)

12 Light carrier

1 Light aircraft carrier (CVSG)

- 1 R 05 Invincible
- 2 R 06 Illustrious
- 3 R 07 Ark Royal
- 4 R 22 VIRAAAT (India)

16 Auxiliary

1 Leander class (training ships)

- 1 F 52 Juno

2 Dartmouth training ship

- 1 M1116 Wilton

3 Improved Hecla class (survey)

- 1 A 138 Herald

4 Hecla class (survey)

- 1 A 133 Hecla

5 A 317 Bulldog class (survey)

- 1 A 317 Bulldog
- 2 A 319 Beagle

6 Roebuck class (survey)

- 1 A 130 Roebuck

7 Ol class (large fleet tankers (AO))

- 1 A 122 Olwen
- 2 A 123 Olna
- 3 A 124 Olmeda

8 Appleleaf class (support tankers (AOT))

- 1 A 81 Brambleleaf (ex-Hudson Cavalier)
- 2 A 109 Bayleaf
- 3 A 110 Orangeleaf (ex-Balder London, ex-Hudson Progress)

9 Rover class (small fleet tankers (AOL))

- 1 A 269 Grey Rover
- 2 A 270 Blue rover
- 3 A 271 Gold rover
- 4 A 273 Black rover

10 Fort Victoria class (fleet replenishment)

- 1 A 387 Fort Victoria
- 2 A 388 Fort George

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			
					11 Fort Grange class (AFS(H))
					1 A 385 Fort Grange
					2 A 386 Fort Austin
					12 Regent class (AFS(H))
					1 A 480 Resource
					2 A 486 Regent
					13 Stena type (forward repair ship)
					1 A 132 Diligence (ex-Stena Inspector)
					14 Sal Class (salvage & mooring)
					1 A 185 Salmoor
					2 A 186 Salmaster
					3 A 187 Salmaid
					15 Wild Duck class (salvage & mooring)
					1 A 164 Goosander
					2 A 165 Pochard
					16 Moorhen class (salvage & mooring)
					1 Y 32 Moorhen
					2 Y 33 Moorfowl
					3 A 72 Cameron
					17 Oilpress class (coastal tankers)
					1 Y 21 Oilpress
					2 Y 22 Oilstone
					3 Y 23 Oilwell
					4 Y 25 Oilbird
					5 Y 26 Oilman
					18 Tornado class (torpedo recovery)
					1 A 140 Tornado
					2 A 141 Torch a 141
					3 A 142 Tormentor
					4 A 143 Toreador
					19 Water class (water carriers)
					1 Y 17 Waterfall
					2 Y 18 Watershed
					3 Y 19 Waterspout
					4 Y 30 Watercourse
					5 Y 31 Waterfowl
					6 A 146 Waterman
					20 Seal class (Irrsc) (aviation support)
					1 5000 Seal
					2 5001 Seagull
					21 Spitfire class (rttl mk 3) (aviation support)
					1 4000 Spitfire

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			
					2 4003 Halifax
					3 4004 Hampden
					4 4005 Hurricane
					5 4006 Lancaster
					6 4007 Wellington
					22 Insect class (fleet tenders)
					1 A 216 Bee
					2 A 229 Cricket
					3 A 230 Cockchafer
					4 A 239 Gnat
					5 A 253 Ladybird
					6 A 263 Cicada
					7 A 272 Scarab
					23 Loyal class (RNXs) (fleet tenders)
					1 A 157 Loyal Helper
					2 A 158 Supporter (ex-Loyal Supporter)
					3 A 159 Loyal Watcher
					4 A 160 Loyal Volunteer
					5 A 161 Loyal Mediator
					6 A 220 Loyal Moderator
					7 A 1770 Loyal Chancellor
					8 A 1771 Loyal Proctor
					24 Clovelly class (fleet tenders)
					1 A 207 Llandovery
					2 A 208 Lamlash
					3 A 211 Lechlade
					4 A 251 Lydford (ex-Loyal Governor, ex-Alert)
					5 A 254 Meavy (ex-Loyal Factor, ex-Vigilant)
					6 A 274 Ettrick
					7 A 277 Elsing
					8 A 341 Fotherby
					9 A 348 Felsted
					10 A 353 Elkstone
					11 A 354 Froxfield
					12 A 355 Epworth
					13 A 365 Fulbeck
					14 A 381 Cricklade
					15 A 391 Criccieth
					16 A 392 Glencoe
					17 A 393 Dunster
					18 A 394 Fintry
					19 A 402 Grasmere
					20 A 488 Cromarty
					21 A 490 Dornoch
					22 A 1766 Headcorn
					23 A 1767 Hever
					24 A 1768 Harlech
					25 A 1769 Hambledon
					26 A 1772 Holmwood

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			

27 A 1773 Horning

25 Manly class (fleet tenders)

- 1 A 83 Melton
- 2 A 84 Menai
- 3 A 87 Meon
- 4 A 91 Milford
- 5 A 107 Messina

26 Magnet class (degaussing vessels)

- 1 A 114 Magnet
- 2 A 115 Lodestone

27 Aberdovey class (auxiliary training vessels)

- 1 A 100 Beddelert
- 2 A 103 Sultan Venturer (ex-Bibury)
- 3 A 383 Appleby
- 4 Y 10 Aberdovey
- 5 Y 11 Abinger
- 6 Y 13 Alnmouth

17 Auxiliary, Merchant Marine

1 Avon class (Royal Corps of Transport)

- 1 RPL 05 Eden
- 2 RPL 06 Forth
- 3 RPL 12 Medway

2 Adept class (TUTT) (tugs)

- 1 A 221 Forceful
- 2 A 222 Nimble
- 3 A 223 Powerful
- 4 A 224 Adept
- 5 A 225 Bustler
- 6 A 226 Capable
- 7 A 227 Careful
- 8 A 228 Faithful
- 9 A 231 Dexterous

3 Dog class (tugs and range-trials vessels)

- 1 A 106 Alsatian
- 2 A 126 Cairn
- 3 A 129 Dalmatian
- 4 A 155 Deerhound
- 5 A 162 Elkhound
- 6 A 168 Labrador
- 7 A 178 Husky
- 8 A 180 Mastiff
- 9 A 182 Saluki
- 10 A 188 Pointer
- 11 A 189 Setter
- 12 A 197 Sealyham

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	224			
					13 A 201 Spaniel
					14 A 250 Sheepdog
					15 A 326 Foxhound (ex-Boxer)
					16 A 327 Basset (ex-Beagle)
					17 A 328 Collie
					18 A 330 Corgi
					4 Modified Girl Class
					1 A 156 Daphne
					2 A 177 Edith
					5 Triton class
					1 A 166 Kathleen
					2 A 170 Kitty
					3 A 172 Lesley
					4 A 174 Lilah
					5 A 175 Mary
					6 A 181 Irene
					7 A 183 Isabel
					8 A 190 Joan
					9 A 193 Joyce
					10 A 199 Myrtle
					11 A 202 Nancy
					12 A 205 Norah
					6 Felicity class
					1 A 112 Felicity
					2 A 147 Frances
					3 A 148 Fiona
					4 A 149 Florence
					5 A 150 Genevieve
					6 A 152 Georgina
					7 A 196 Gwendoline
					8 A 198 Helen
					54 Amphibious Assault Ship
					1 LPH01 Ocean
					56 Amphibious transport dock
					1 Assault ships (LPD)
					1 L 10 Fearless
					2 L 11 Intrepid

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	224	1		SSBN (Nuclear Ballistic Missiles)
			1		Vanguard Class
			1	05	Vanguard
			2	06	Victorious
			3	07	Vigilant
			4	08	
			2		Resolution Class
			1	S 22	Resolution
			2	S 23	Repulse
			3	S 26	Renown
			4	S 27	Revenge
			3		SSN (Nuclear Attack-Torpedo)
			1		Trafalgar Class
			1	S 87	Turbulent
			2	S 88	Tireless
			3	S 90	Torbay
			4	S 91	Trenchant
			5	S 92	Talent
			6	S 93	Triumph
			7	S 107	Trafalgar
			2		Swiftsure Class
			1	S 104	Sceptre
			2	S 105	Spartan
			3	S 106	Splendid
			4	S 108	Sovereign
			5	S 109	Superb
			3		Valiant Class
			1	S 102	Valiant
			5		SS (Conventional Attack-Torpedo, Patrol)
			1		Upholder class (Type 2400)
			1	S 40	Upholder
			2	S 41	Unseen
			3	S 42	Ursula
			4	S 43	Unicorn
			2		Oberon Class
			1	S 16	Oracle
			2	S 19	Opossum
			3	S 20	Opportune
			60		Onslow (Australia)
			62		Otama (Australia)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	224	0		Other
			1		Manned
			2		Unmanned
			1		Communication satellite
			1		Skynet 4
			2		Skynet 4A
			3		Skynet 4B
			4		Skynet 4C
			5		NATO 4
			6		ECS
			7		Eurostar

4.2.3.1.4 French platforms

All French platforms have a Kind-field value of 1 and a Country-field value of 71.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	71	1	Tank	
				1	AMX-30
				1	AMX-30B2
				2	AMX-13 Light Tank
				3	AMX-40 MBT
				4	Le Clerc
				2	Armored fighting vehicle
				1	VBC-90 armored car
				2	ERC-90 armored car
				3	AML-90 armored car
				4	AML-60 armored car
				5	VAB APC
				6	AMX-10RC armored car
				7	AMX-13 IFV
				8	AMX-10 IFV
				9	EBR armored car
				10	AMX-13 VCI APC
				11	AMX-13 DCA
				12	Berliet VXB armored car
				13	Panhard EBR
				3	Armored utility vehicle
				1	AMX-10 ECH Recovery Vehicle
				4	Self-propelled artillery
				1	A UF1 155-mm Howitzer

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	71			
				2	AMX 105-mm Howitzer
				3	AU-50 105-mm Howitzer
				4	F-3 155-mm gun
			5		Towed artillery
				1	TR 155-mm Howitzer
			6		Small wheeled utility vehicle
			7		Large wheeled utility vehicle
			8		Small tracked utility vehicle
			9		Large tracked utility vehicle
			10		Mortar
			11		Mine plow
			12		Mine rake
			13		Mine roller
			14		Cargo trailer
				1	0 - 0.5 ton
				2	0.51 - 2 ton
				3	2.01 - 5 ton
				4	5.02 - 10 ton
				5	greater than 10 tons
			15		Fuel trailer
				1	1-1000 gallons
				2	1001 - 5000 gallons
				3	greater than 5000 gallons
			16		Generator trailer
				1	0 - 100 KW
				2	greater than 100 KW

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	71			
			17		Water trailer
				1	1-1000 gallons
				2	1001- 5000 gallons
				3	greater than 5000 gallons
			18		Engineer equipment
				1	Mine clearing line charge
				2	Dozer blade kit
				3	Lane marking system
			19		Heavy equipment transport trailer
			20		Maintenance equipment trailer
				1	Welding trailer
				2	Compressor
				3	Tools/parts trailer
			21		Limber
			22		Chemical decontamination trailer
			28		Air Defense / Missile Defense Unit Equipment
				1	Crotale SAM System
					1 Crotale P4R Missile Firing System
					2 Crotale P4R Radar System
				2	Crotale NG SAM System

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	71			

1 Fighter/Air Defense

1 Mirage F-1

- 1 F1-AD
- 2 F1-AZ
- 3 F1-B
- 4 F1-BD
- 5 F1-BE
- 6 F1-BJ
- 7 F1-BK
- 8 F1-BQ
- 9 F1-B & E
- 10 F1-C
- 11 F1-CE
- 12 F1-CG
- 13 F1-CH
- 14 F1-CJ
- 15 F1-CK
- 16 F1-CR-200
- 17 F1-CZ
- 18 F1-C-200s
- 19 F1-DDA
- 20 F1-ED
- 21 F1-EDA
- 22 F1-EE
- 23 F1-EH
- 24 F1-EJ
- 25 F1-EQ
- 26 F1-JA
- 27 F1-JE

3 Mirage III

- 1 Mirage III-D
- 2 Mirage III-E

4 Mirage 2000

- 1 Mirage 2000AD
- 2 Mirage 2000BGM
- 3 Mirage 2000C
- 4 Mirage 2000D
- 5 Mirage 2000DAD
- 6 Mirage 2000DP
- 7 Mirage 2000E
- 8 Mirage 2000EAD
- 9 Mirage 2000EGM
- 10 Mirage 2000H (KF-101)
- 11 Mirage 2000N
- 12 Mirage 2000P
- 13 Mirage 2000RAD
- 14 Mirage 2000TH (KT-201)
- 15 Mirage 2000-5
- 16 Vajra (Divine Thunder)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	71			
				5	Dassault Rafale (Squall)
				1	Rafale B
				2	Rafale C
				3	Rafale S-1 Standard
				4	Rafale M
				6	Mirage 50
			2		Attack/Strike
				1	Dassault/BAe Jaguar
				2	Etendard IV-P
				3	Dassault Super Etendard
				1	Super Etendard
				4	Dassault/Dornier Alpha Jet
				1	Alpha Jet 2
				2	Alpha Jet E
				3	Alpha Jet A
				4	Alpha Jet 3
				5	Mirage 5
				7	Mirage IV
			3		Bomber
			4		Cargo/Tanker
				1	Transall C-160
				2	Dassault Mystere-Falcon 50
				3	T.16 air ambulance.
				4	Reims F 406 Caravan II
				1	Reims F 406 Vigilante
				5	SECA/Fokker F27 Friendship Arat
				6	Dassault Mystere-Falcon 20
				1	HU-25 Guardian
			5		Antisubmarine/patrol/observation
				1	Dassault Alantique 2

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	71		2	Dassault (Breguet) Alize
				3	Dassault (Breguet) (1050) Atlantic
				4	Dassault Mystere-Falcon 900
				1	T.18
				5	Dassault Gardian 2
			6		Electronic Warfare (EW)
				1	Transall C-160
				2	Dassault (Breguet 1050) Alize
				3	Dassault Mystere-Falcon 20 (ECM)
			7		Reconnaissance
				1	Dassault Mystere-Falcon 900
				2	Mirage III
				1	Mirage III-R
				2	Mirage III-R2Z
				3	Mirage III-RD
				3	Dassault Mystere-Falcon 20SNR
			20		Attack Helicopter
				1	Eurocopter AS 532 Cougar
				1	AS 532AC
				2	AS 532AL
				2	Eurocopter SA342 Gazelle
				1	SA 342ATAM
				2	SA 342M Viviane
				3	Eurocopter BO 105/PAH-1/VBH/BSH-1
				1	BO 105 PAH-1A1
			21		Utility Helicopter
				1	Aerospatiale SA 313B Alouette II
				2	Aerospatiale SA 315B
				1	Cheetah
				3	Aerospatiale SA 316B Alouette III
				4	Aerospatiale SA 321 Super Frelon
				1	SA 321H

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	71			
				5	Aérospatiale SA 330 Puma
				1	330 Puma
				2	332M Super Puma
				3	Super Puma/Puma
				6	Aérospatiale SA 341 Gazelle
				2	SA 341B
				3	Gazelle HT. Mk 3
				4	Gazelle HCC. Mk4
				5	SA 341 F
				6	SA 341 H
				7	Eurocopter AS 332L Super Puma MK II and AS 532 Cougar MkII
				1	532U2 Cougar MK II
				2	532A2 Cougar Mk II
				8	Eurocopter SA 342 Gazelle
				2	SA 342M
				9	Eurocopter AS 532 Cougar
				1	AS 532UC
				3	AS 532MC
				4	AS 532UL
				10	Eurocopter AS 565 Panther
				1	AS 365N2 Dauphin 2
				2	AS 565MA
				11	Eurocopter 365N2 Dauphin 2
				1	AS 366G1 (HH-65A Dolphin)
				12	Eurocopter BO 105
				13	Eurocopter AS 350 Ecureuil/Astar and AS 550 Fennec
				1	CH-50
				2	TH-50 Esquilo
				3	HA-1 Esquilo
				4	UH-12 Esquilo
				5	AS 350BA Ecureuil
				6	AS 350B2 Ecureuil
				7	AS 350 B3 Ecureuil
				8	AS 350D Astar
				9	AS 350 Firefighter
				10	AS 550 Fennec
				11	550A2
				12	AS 550C2
				13	AS 550M2
				14	AS 550S2
				14	Eurocopter AS 355 Ecureuil 2 Twinstar and AS 555 Fennec
				1	CH-55

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	71			2 VH-55 Esquilo 3 UH-12B Esquilo 4 AS 555UN Fennec 5 AS 555AN Fennec 6 AS 555CN Fennec 7 AS 555MN Fennec 8 AS 555SN Fennec naval ASW
					15 Eurocopter AS 365N2 Dauphin 2 1 AS 366G1 (HH-65A Dolphin) 2 AS 565 Panther 3 HM-1 4 AS 565AA 5 AS 565CA 6 AS 565 Panther 807 AS 565MA Panther 8 AS 565SA Panter
					22 Antisubmarine Warfare / Patrol Helicopter 1 Aerospatiale SA 319B ASTAZOU 2 Aerospatiale SA 321 Super Frelon 1 AS 32 3 Eurocopter AS 532 Cougar 1 AS 532SC 4 Eurocopter AS 565 Panther 1 AS 565SA 2 AS 565F (MA)
					40 Trainer 1 Mudry CAP 10 B 2 Socata TB 30 Epsilon 3 Socata TB 31 Omega 4 SEPECAT Jaguar International 1 Jaguar GR. Mk 1A 5 Dassault Mystere-Falcon 20SNA
					57 Non-Combatant Commercial Aircraft 1 Passenger Airline 1 A320 Air Bus

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>	<u>Extra</u>
1	3	71				

1 Carrier (Porte-Avions)

1 Nuclear-Propelled Aircraft Carriers (CVN)

1 R 91 Charles De Gaulle

2 Clemenceau class (CV)

1 R 98 Clemenceau

2 R 99 Foch

4 Guided Missile Destroyer (Frigates or Escorteurs D'escadres)

1 Georges Leygues Class (Type f 70 (ASW))

1 D 640 Georges Leygues

2 D 641 Dupleix

3 D 642 Montcalm

4 D 643 Jean de vienne

5 D 644 Primauguet

6 D 645 La motte-picquet

7 D 646 Latouche-treville

2 Cassard class (Type F 70 (A/A))

1 D 614 Cassard

2 D 615 Jean Bart

3 Suffren class

1 D 602 Suffren

2 D 603 Duquesne

4 Tourville class (Type F 67)

1 D 610 Tourville

2 D 611 Duguay-Trouin

3 D 612 De grasse

5 Type F 65 (ASW)

1 D 609 Aconit (ex-F 703)

6 Guided-missile Frigate

1 La Fayette class (light frigates)

1 F 710 Lafayette

2 F 711 Surcouf

3 F 712 Courbet

2 Floreal class (patrol frigates)

1 F 730 Floreal

2 F 731 Prairial

3 F 732 Nivose

4 F 733 Ventose

5 F 734 Vendemiaire

6 F 735 Germinal

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>	<u>Extra</u>
1	3	71				

7 Light/patrol craft

1 P 400 class (fast attack craft--patrol)

- 1 P 682 L'audacieuse
- 2 P 683 La boudeuse
- 3 P 684 La capricieuse
- 4 P 685 La fouguese
- 5 P 686 La glorieuse
- 6 P 687 La gracieuse
- 7 P 688 La moqueuse
- 8 P 689 La railleuse
- 9 P 690 La rieuse
- 10 P 691 La tapageuse

2 Thomson-CSF Type (large patrol craft)

- 1 P 696 Iris

3 Combattante IIG Class

8 Mine Countermeasure Ship / Craft

1 Narvik class (minehunter/sweeper)

- 1 M 660 Narvik
- 2 Bir Hakeim
- 3 Garigliano
- 4 Autun
- 5 Colmar
- 6 Berlaimont

2 Eridan (Tripartite) class (minehunters)

- 1 M 641 Eridan
- 2 M 642 Cassiopee
- 3 M 643 Andromede
- 4 M 644 Pegase
- 5 M 645 Orion
- 6 M 646 Croix du sud
- 7 M 647 Aigle
- 8 M 648 Lyre
- 9 M 649 Persee

3 Circe class (minehunters)

- 1 M 712 Cybele
- 2 M 713 Calliope
- 3 M 714 Clio
- 4 M 715 Circe
- 5 M 716 Ceres

4 ex-US Aggressive class (minesweepers)

- 1 M 610 Ouistreham (ex-MSO 513)
- 2 M 612 Alencon (ex-MSO 453)
- 3 M 623 Baccarat (ex-MSO 505)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>	<u>Extra</u>
1	3	71				

5 MCM diving support ships

- 1 A 613 Acheron
- 2 M 611 Vulcain
- 3 M 614 Styx
- 4 M 622 Pluton

9 Dock Landing Ship

1 Foudre class (Type TCD 90)

- 1 L 9011 Foudre

2 Ouragan class (TCDs)

- 1 L 9021 Ouragan
- 2 L 9022 Orage

11 Landing Craft

1 Bougainville class (BTs)

- 1 L 9077 Bougainville

2 Batral type (light transports and landing ships)

- 1 L 9030 Champlain
- 2 L 9031 Francis Garnier
- 3 L 9032 Dumont D'urville
- 4 L 9033 Jacques Cartier
- 5 L 9034 La grandiere

3 Edic 700 class (LCT)

- 1 L 9051
- 2 L 9052

4 Edic class (LCT)

- 1 L 9070
- 2 L 9072
- 3 L 9074

5 CDIC class (LCT)

- 1 L 9061
- 2 L 9062

6 Transport landing ship

- 1 L 9090 Gapeau

13 Cruiser/Helicopter Carrier

1 Jeanne D'Arc Class (Helo CV)

16 Auxiliary

1 BH2 class (Batiments Hydrographiques De 2E class)
(oceanographic & survey)

- 1 A 791 Laperouse

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>	<u>Extra</u>
1	3	71			2 A 792 Borda	
					3 A 793 Laplace	
					4 A 795 Arago	
					2 Durance class (underway replenishment tankers)	
					1 A 607 Meuse	
					2 A 608 Var	
					3 A 629 Durance	
					4 A 630 Marne	
					5 A 631 Somme	
					3 Maintenance and repair ship	
					1 A 620 Jules Verne (ex-Acheron)	
					4 Rhin class (depot and support ships)	
					1 A 615 Loire	
					2 A 617 Garonne	
					3 A 618 Rance	
					4 A 621 Rhin	
					5 A 622 Rhone	
					5 Chamois class (supply tenders)	
					1 A 633 Taape	
					2 A 767 Chamois	
					3 A 768 Elan	
					4 A 774 Chevreuil	
					5 A 775 Gazelle	
					6 A 776 Isard	
					7 A 779 Tapatai (ex-Silver Fish)	
					6 RR 4000 type (supply tenders)	
					1 A 634 Rari	
					2 A 635 Revi	
					7 Leopard class (training ships)	
					1 A 748 Leopard	
					2 A 749 Panthere	
					3 A 750 Jaguar	
					4 A 751 Lynx	
					5 A 752 Guepard	
					6 A 753 Chacal	
					7 A 754 Tigre	
					8 A 755 Lion	
					17 Auxiliary, Merchant Marine	
					1 Government Maritime Forces	
					1 Patra Class (fast patrol craft)	
					1 P 670 Trident	
					2 P 671 Glaive	
					3 P 672 Epee	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>	<u>Extra</u>
1	3	71				

4 P 673 Pertuisane

2 Harbour tugs (Remorqueurs De Port)

1 105-ton type

- 1 Y 601 Acajou
- 2 Y 620 Chataigner
- 3 Y 623 Charme
- 4 Y 624 Chene
- 5 Y 629 Cormier
- 6 Y 644 Frene
- 7 Y 654 Hetre
- 8 Y 655 Hevea
- 9 Y 663 Latanier
- 10 Y 666 Manguier
- 11 Y 668 Meleze
- 12 Y 669 Merisier
- 13 Y 686 Paletuvier
- 14 Y 688 Peuplier
- 15 Y 689 Pin
- 16 Y 695 Platane
- 17 Y 708 Saule
- 18 Y 709 Sycomore
- 19 Y 717 Ebene
- 20 Y 718 Erable
- 21 Y 719 Olivier
- 22 Y 720 Santal
- 23 Y 738 Maronnier
- 24 Y 739 Noyer
- 25 Y 740 Papayer

2 93-ton type

- 1 Y 630 Bonite
- 2 Y 634 Rouget

3 65-ton type

- 1 Y 611 Bengali
- 2 Y 617 Mouette
- 3 Y 621 Mesange
- 4 Y 625 Cigogne
- 5 Y 628 Colibri
- 6 Y 632 Cygne
- 7 Y 636 Martinet
- 8 Y 637 Fauvette
- 9 Y 648 Goeland
- 10 Y 670 Merle
- 11 Y 673 Moineau
- 12 Y 675 Martin Pecheur
- 13 Y 687 Passereau
- 14 Y 691 Pinson
- 15 Y 694 Pivert
- 16 Y 721 Alouette

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>	<u>Extra</u>
1	3	71				
					17 Y 722 Vanneau	
					18 Y 723 Engouevent	
					19 Y 724 Sarcelle	
					20 Y 725 Marabout	
					21 Y 726 Toucan	
					22 Y 727 Macreuse	
					23 Y 728 Grand Duc	
					24 Y 729 Eider	
					25 Y 730 Ara	
					26 Y 747 Lorient	
					27 Y 748 Gelinotte	

50 Frigate

1 D'estienne D'orves (Type A 69) class

- 1 F 781 D'estienne D'orves
- 2 F 782 Amyot d'inville
- 3 F 783 Drogou
- 4 F 784 Detroyat
- 5 F 785 Jean Moulin
- 6 F 786 Quartier Maitre Anquetil
- 7 F 787 Commandant de Pimodan
- 8 F 788 Second Maitre Le Bihan
- 9 F 789 Lieutenant De Vaisseau Le Henaff
- 10 F 790 Lieutenant De Vaisseau Lavallee
- 11 F 791 Commandant L'herminier
- 12 F 792 Premier Maitre L'her
- 13 F 793 Commandant Blaison
- 14 F 794 Enseigne De Vaisseau Jacoubet
- 15 F 795 Commandant Ducuing
- 16 F 796 Commandant Birot
- 17 F 797 Commandant Bouan

2 Commandant Riviere class (Avisos Escorteurs)

- 1 F 726 Commandant Bory
- 2 F 729 Balny
- 3 F 749 Enseigne de Vaisseau Henry

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	71			
			1		SSBN (Nuclear Ballistic Missile)
			1		Le Triomphant class (SNLE-NG)
			1	S 616	Le triomphant
			2	S 617	Le temeraire
			3	S 618	
			2		SSGN (Nuclear Guided Missile)
			1		L'inflexible class (SNLE)
			1	S 610	Le foudroyant
			2	S 612	Le terrible
			3	S 613	L'indomptable
			4	S 614	Le tonnant
			5	S 615	L'inflexible
			3		SSN (Nuclear Attack Ballistic Missile) (Sous-Marins Nucleaires D'attaque (SNA))
			1		Rubis Class (SNA 72)
			1	S 601	Rubis
			2	S 602	Saphir
			3	S 603	Casabianca
			4	S 604	Emeraude
			5	S 605	Amethyste
			6	S 606	Perle
			7	S 607	Turquoise
			5		SS (Conventional Attack-Torpedo, Patrol) (Sous-Marins D'attaque)
			1		Agosta Class
			1	S 620	Agosta
			2	S 621	Beveziers
			3	S 622	La praya
			4	S 623	Ouessant
			2		Daphne Class
			1	S 643	Doris
			2	S 648	Jun
			3	S 650	Psyche
			4	S 651	Sirene

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	71	0		Other
			1		Manned
			6		Space Plane
				1	Hermes
			2		Unmanned
			1		Communication satellite
				1	Telecom
				2	Hispasat
				3	Eutelsat
				4	Turksat
				6	Argos
				7	S80/T
				8	Arsene
				9	Syracuse
			2		Navigation satellite
			4		Electronic Intelligence satellite
				1	Cerise
			7		Imaging Radar surveillance satellite
				1	Helios
				2	Osiris SAR
			8		Optical imaging surveillance satellite
				1	Syracuse 3
			13		Science satellite
				1	Hipparcos
				2	Titan
				3	Topex/Poseidon
				4	Starlette
				5	SRAT 2
			14		Survey satellite
				1	Stella
			3		Booster
				1	Ariane

4.2.3.1.5 German platforms

All German platforms have a Kind field value of 1 and a Country field value of 78.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	78			
			1		Tank
				1	Leopard 1 MBT
				1	A1
				2	A2
				3	A3
				4	A4
				5	A5
				2	Leopard 2 MBT
				3	Leopard 2 (improved) MBT
				1	(S) Stridsfordon 122
			2		Armored Fighting Vehicle
				1	Marder 1 A3
				2	Marder 2
				3	BMP 1
				4	Jaguar 1 tank destroyer, missile
				5	Jaguar 2
				6	Luchs armored reconnaissance vehicle
				7	Zobel armored reconnaissance vehicle
				10	Wiesel
				1	Wiesel with 20mm
				2	Wiesel with TOW
			3		Armored Utility Vehicle
				1	Biber armored bridge layer
				2	Dachs armored engineer tank
				3	Keiler armored minesweeper
				4	Skorpion armored minelayer
				6	M113 armored motor-ambulance
				7	M113 armored artillery observer

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	78			8 Transportpanzer 1 "Fuchs"
					9 Buffel ARV
			5		Towed Artillery
			6		Small Wheeled Utility Vehicle (0 - 1.25 tons)
				1	Mercedez Benz (240 GD)
			7		Large Wheeled Utility Vehicle (greater than 1.25 tons)
				1	IVECO Magirus 110-16 AWM (4x4) 5000kg truck (aka 168M11FAL)
			10		Mortar
				1	M113 armored mortar
			11		Mine plow
			12		Mine rake
			13		Mine roller
			14		Cargo trailer
				1	0 - 0.5 ton
				2	0.51 - 2 ton
				3	2.01 - 5 ton
				4	5.02 - 10 ton
				5	greater than 10 tons
			15		Fuel trailer
				1	1-1000 gallons
				2	1001 - 5000 gallons
				3	greater than 5000 gallons
			16		Generator trailer
				1	0 - 100 KW
				2	greater than 100 KW
			17		Water trailer

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	78		1	1-1000 gallons
				2	1001- 5000 gallons
				3	greater than 5000 gallons
			18		Engineer equipment
				1	Mine clearing line charge
				2	Dozer blade kit
				3	Lane marking system
			19		Heavy equipment transport trailer
			20		Maintenance equipment trailer
				1	Welding trailer
				2	Compressor
				3	Tools/parts trailer
			21		Limber
			22		Chemical decontamination trailer
			28		Air Defense/Missile Defense Unit Equipment
				1	Self-Propelled VSHORAD Gun/Missile System
				1	Roland AD System missile
				2	Gepard armored AD gun
				2	Towed VSHORAD Gun / Missile System
				1	Rheinmetal 20mm twin Rh202

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	78			
			1		Fighter/Air Defense
				4	EFM (Enhanced Fighter Maneuverability) X-31A
			2		Attack/Strike
				1	Dassault/Dornier Alpha Jet
				1	Alpha Jet E trainer/attack
				2	Alpha Jet MS1
				3	Alpha Jet A
				4	Alpha Jet MS2
				5	Alpha Jet 2
				2	Panavia Tornado IDS
				1	Tornado IDS GR. Mk 1
				2	Tornado IDS GR. 1A
				3	Tornado IDS GR. 4
			6		Electronic Warfare (EW)
				1	Panavia Tornado ECR
			8		Surveillance/C ²
				1	Transall C-160
				1	C-160S. Maritime
				2	C-160SE. Electronic
				3	C-160AAA AEW
				2	Egrett II
				1	Strato 1
			20		Attack Helicopter
				1	Eurocopter BO 105/PAH-1/VBH/BSH-1
				1	PAH-1
				2	PAH-1A1
				3	BSH
				7	Hkp 9
				2	Eurocopter Tigre
				1	PAH-2
				2	HAC
				3	HAP
			21		Utility Helicopter
				1	NH 90
				1	TTH 90 medium helicopter

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	78			
				6	Eurocopter BO 105
					1 BO 105CB
					2 BO 105CBS
				7	Eurocopter/Kawasaki BK 117
					1 BK 117 M
					2 NBK-117
				22	Antisubmarine Warfare / Patrol Helicopter
					1 NH 90
					2 NFH 90
				40	Trainer
					1 Dassault/Dornier Alpha Jet
					1 Alpha Jet E
					2 Alpha Jet 3

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			

4 Guided Missile Destroyer

1 Ex-US Modified Charles F. Adams class (type 103B) (DDGs)

- 1 D 185 Lutjens (ex-US DDG 28)
- 2 D 186 Molders (ex-US DDG 29)
- 3 D 187 Rommel (ex-US DDG 30)

5 Destroyer

2 Hamburg class (Type 101A)

- 2 D 182 Schleswig-Holstein

6 Guided Missile Frigate

1 Brandenburg class (type 123)

- 1 F 215 Brandenburg
- 2 F 216 Schleswig-Holstein
- 3 F 217 Bayern
- 4 F 218 Mecklenburg-Vorpommern

2 Bremen class (type 122)

- 1 F 207 Bremen
- 2 F 208 Niedersachsen
- 3 F 209 Rheinland-Pfalz
- 4 F 210 Emden
- 5 F 211 Koln
- 6 F 212 Karlsruhe
- 7 F 213 Augsburg
- 8 F 214 Lubeck

7 Light/patrol craft

1 Gepard class (type 143 A) (fast attack craft, missile)

- 1 P 6121 Gepard
- 2 P 6122 Puma
- 3 P 6123 Hermelin
- 4 P 6124 Nerz
- 5 P 6125 Zobel
- 6 P 6126 Frettechen
- 7 P 6127 Dachs
- 8 P 6128 Ozelot
- 9 P 6129 Wiesel
- 10 P 6130 Hyane

2 Albatros class (type 143/143B) (fast attack craft, missile)

- 1 P 6111 Albatros
- 2 P 6122 Falke
- 3 P 6113 Geier
- 4 P 6114 Bussard
- 5 P 6115 Sperber
- 6 P 6116 Greif
- 7 P 6117 Kondor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			

8 P 6118 Seeadler
9 P 6119 Habicht
10 P 6120 Kormoran

3 Tiger class (type 148) (fast attack craft, missile)

1 P 6141 Tiger
2 P 6142 Iltis
3 P 6143 Luchs
4 P 6144 Marder
5 P 6145 Leopard
6 P 6146 Fuchs
7 P 6147 Jaguar
8 P 6148 Lowe
9 P 6149 Wolf
10 P 6150 Panther
11 P 6151 Hafer
12 P 6152 Storch
13 P 6153 Pelikan
14 P 6154 Elster
15 P 6155 Alk
16 P 6156 Dommel
17 P 6157 Weihe
18 P 6158 Pinguin
19 P 6159 Reiher
20 P 6160 Kranich

4 Bredstedt class (large patrol craft, Coast Guard vessels)

1 BG 21 Bredstedt

5 Sassnitz class (Coast Guard vessels)

1 Sassnitz (ex-P 6165, ex-591)
2 Sellin (ex-592)
3 Binz (ex-593)

6 Neustadt class (large patrol craft, Coast Guard vessels)

1 BG 11 Neustadt
2 BG 12 Bad Bramstedt
3 BG 14 Duderstadt
4 BG 15 Eschwege
5 BG 16 Alsfeld
6 BG 17 Bayreuth
7 BG 18 Rosenheim

7 Bremse class (harbor patrol craft, Coast Guard vessels)

1 GS 23
2 GS 30
3 GS 31
4 GS 32
5 GS 40
6 GS 41
7 GS 42

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			8 GS 51 9 GS 52

8 Mine Countermeasure Ship / Craft

1 Schutze class (type 340-341, minesweepers, coastal)

- 1 M 1059 Spica
- 2 M 1062 Schutze
- 3 M 1063 Waage

2 Lindau class (coastal minesweepers and minehunters: type 331, minehunters; and type 351, Troika)

- 1 M 1070 Gottingen
- 2 M 1071 Koblenz
- 3 M 1072 Lindau
- 4 M 1073 Schleswig
- 5 M 1074 Tubingen
- 6 M 1075 Wetzlar
- 7 M 1076 Paderborn
- 8 M 1077 Weilheim
- 9 M 1078 Cuxhaven
- 10 M 1079 Duren
- 11 M 1080 Marburg
- 12 M 1081 Konstanz
- 13 M 1082 Wolfsburg
- 14 M 1083 Ulm
- 15 M 1085 Minden

3 Kondor II class (minesweeper, coastal)

- 1 M2670 Sommerda (ex-311)

4 Frauenlob class (type 394 minesweepers, inshore)

- 1 M 2658 Frauenlob
- 2 M 2659 Nautilus
- 3 M 2660 Gefion
- 4 M 2661 Medusa
- 5 M 2662 Undine
- 6 M 2663 Minerva
- 7 M 2664 Diana
- 8 M 2665 Loreley
- 9 M 2666 Atlantis
- 10 M 2667

5 Ariadne Class (Type 393 minesweepers, inshore)

- 1 M 2651 Freya
- 2 M 2653 Hertha
- 3 M 2654 Nympe
- 4 M 2655 Hertha

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			

6 Frankenthal class (type 332 minehunters, coastal)

- 1 M 1060 Weiden
- 2 M 1061 Rottweil
- 3 M 1062 Sulzbach-Rosenberg
- 4 M 1063 Bad Bevensen
- 5 M 1064 Gromitz
- 6 M 1065 Dillingen
- 7 M 1066 Frankenthal
- 8 M 1067 Bad Rappenau
- 9 M 1068 Datteln
- 10 M 1069 Homburg

7 Hameln class (type 343 minesweepers, coastal)

- 1 M 1090 Pegnitz
- 2 M 1091 Kulmbach
- 3 M 1092 Hameln
- 4 M 1093 Auerbach
- 5 M 1094 Ens Dorf
- 6 M 1095 Uberherrn
- 7 M 1096 Passau
- 8 M 1097 Laboe
- 9 M 1098 Siegburg
- 10 M 1099 Herten

8 Trials ship (type 740, ex-minesweeper)

- 1 A 1400 Holnis (ex-A 836)

9 Schutze class (type 732, diver-support ship)

- 1 M 1053 Stier (ex-Y 849)

10 Sachsenwald class (type 762, mine transport)

- 1 A 1438 Steigerwald

11 Kondor I class (minesweeper/patrol craft; Coast Guard vessels)

- 1 BG 31 Templin (ex-GS 06, ex-G 442)
- 2 BG 32 Kuhlungsborn (ex-GS 07, ex-G 445)
- 3 BG 33 Ahrenshoop (ex-GS 08, ex-G 415)
- 4 GS 01 Uckermunde (ex-G 411)
- 5 GS 02 Demmin (ex-G 422)
- 6 GS 03 Malchin (ex-G 441)
- 7 GS 04 Altentreptow (ex-G 414)
- 8 GS 05 Pasewalk (ex-G 423)
- 9 GS 09 Boltenhagen (ex-G 443)

11 Landing Craft

1 Type 521 (LCMs)

- 1 LCM 12 Sprotte
- 2 LCM 13 Sardine
- 3 LCM 14 Sardelle
- 4 LCM 15 Hering

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			

- 5 LCM 16 Orfe
- 6 LCM 17 Marane
- 7 LCM 18 Saibling
- 8 LCM 19 Stint
- 9 LCM 20 Aesche
- 10 L 780 Hummer
- 11 L 781 Krill
- 12 L 782 Krabbe
- 13 L 783 Auster
- 14 L 784 Muschel
- 15 L 785 Koralle
- 16 L 786 Garnele
- 17 L 787 Languste

2 Type 520 (LCUs)

- 1 L 760 Flunder
- 2 L 761 Karpfen
- 3 L 762 Lachs
- 4 L 763 Plotze
- 5 L 766 Stor
- 6 L 767 Tumbler
- 7 L 768 Wels
- 8 L 769 Zander
- 9 L 788 Butt
- 10 L 795 Inger

3 Mannheim 59 class (river landing craft, LCMs)

4 Bodan class (river landing craft, LCMs)

16 Auxiliary

1 Elbe class (type 404, tenders)

- 1 A 511 Elbe
- 2 A 512 Mosel
- 3 A 513 Rhein
- 4 A 514 Werra
- 5 A 515 Main
- 6 A 516 Donau

2 Rhein class (type 401, tenders)

- 1 A 58 Rhein
- 2 A 61 Elbe
- 3 A 63 Main
- 4 A 69 Donau

3 Replenishment tankers (type 704)

- 1 A 1442 Spessart (ex-Okapi)
- 2 A 1443 Rhon (ex-Okene)

4 Walchensee class (type 703, replenishment tankers)

- 1 A 1424 Walchensee

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			
					2 A 1425 Ammersee
					3 A 1426 Tegernsee
					4 A 1427 Westensee
					5 Type 763 (support tanker)
					1 A 1407 Wittensee (ex-Sioux)
					6 Luneburg class (type 701, support ships)
					1 A 1411 Luneburg
					2 A 1413 Freiburg
					3 A 1414 Glucksburg
					4 A 1415 Saarburg
					5 A 1416 Nienburg
					6 A 1417 Offenburg
					7 A 1418 Meersburg
					7 Westerwald class (type 760, ammunition transports)
					1 A 1435 Westerwald
					2 A 1436 Odenwald
					8 Towing launches (type 946)
					1 AK 1 Y 1671
					2 AK 3 Y 1672
					3 MA 2 Y 1676
					4 MA 3 Y 1677
					5 Borby Y 1687
					9 Oste Class (type 423, AGI)
					1 A 50 Alster
					2 A 52 Oste
					3 A 53 Oker
					10 Trials ship (type 742)
					1 A 1410 Walther Von Ledebur (ex-Y 841)
					11 Research ship (type 750)
					1 A 1450 Planet
					12 Trials ship (type 741)
					1 A 1408 SP 1 (ex-A 837)
					2 A 1409 Wilhelm Pullwer (ex-Y 838)
					13 Diving tender (type 732)
					1 M 1050 TB1
					14 Helgoland class (type 720, salvage tugs)
					1 A 1457 Helgoland
					2 A 1458 Fehmarn
					15 Wangerooze class (type 722, type 754; tugs)
					1 A 1439 Baltrum
					2 A 1440 Juist

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			
				3	A 1441 Langeoog
				4	A 1451 Wangerooge
				5	A 1452 Spiekeroog
				6	A 1455 Rderney

17 Auxiliary, Merchant Marine

1 Harbor tugs (type 724)

- 1 Y 820 Sylt
- 2 Y 821 Fohr
- 3 Y 822 Amrum
- 4 Y 823 Neuwerk
- 5 Y 1680 Neuende
- 6 Y 1681 Heppens
- 7 Y 1682 Ellerbek

2 Harbor tugs (type 725)

- 1 Y 812 Lutjehorn
- 2 Y 814 Knechtsand
- 3 Y 815 Scharhorn
- 4 Y 816 Vogelsand
- 5 Y 817 Rdstrand
- 6 Y 819 Langeness

3 Harbor tugs (type 414)

- 1 Koos (ex-Delphin)
- 2 Wustrow (ex-Zander)
- 3 Drankse (ex-Kormoran)
- 4 Y 1651 (ex-A 08)
- 5 Y 1656 (ex-A 45)
- 6 Y 1658 (ex-A 68)

4 Icebreaking tug (type 724; Coast Guard vessels)

- 1 BG 5 Rettin

18 Utility

1 Gustav Konigs class (harbor tankers)

- 1 Y 1652 Kolpinsee (ex-C 11)
- 2 Y 1657 Fleesensee (ex-C 40)

2 Ohre class (accommodation ships)

- 1 Y 890 Vogtland (ex-H 71)
- 2 Y 891 Altmark (ex-H 11)
- 3 Y 892 Havelland (ex-H 51)
- 4 Y 893 Uckermark (ex-H 91)
- 5 Y 894 Borde (ex-H 72)
- 6 Y 895 Wische (ex-H 31)

3 Type 705 (water boats)

- 1 FW 1 A 1403 (ex-Y 864)
- 2 FW 5 A 1405 (ex-Y 868)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			

4 Knurrhahn Class (type 730, accommodation ship)

1 Y 811 Knurrhahn

5 Battery-charging craft (type 718)

1 LP 1

2 LP 2

3 Y 1690 LP 3

6 Schwedeneck class (type 748, multipurpose)

1 Y 860 Schwedeneck

2 Y 861 Kronsart

3 Y 862 Helmsand

7 Stollergrund class (type 745, multipurpose)

1 Y 863 Stollergrund

2 Y 864 Mittelgrund

3 Y 865 Kalkgrund

4 Y 866 Breitgrund

5 Y 867 Bant

8 Trials ship (type 740)

1 Y 871 Heinz Roggenkamp

9 Floating docks (types 712-715) and cranes (type 711)

1 A Y 842 Schwimmdocks

2 Y 875 Hiev

3 B Y 879 Schwimmdocks

4 Y 876 Griep

5 c, 2 and 3

10 Tank cleaning vessels (type 710)

1 Y 1641 Forde

2 Y 1642 Jade

11 Trial boat (type 740)

1 Y 1689 Bums

12 General service launches (types 740, 743, 744, 744a)

1 Y 1670 MT-BOOT

2 Y 1673 AK 5

3 Y 1674 AK 6

4 Y 1675 AM 8

5 Y 1679 AM 7

6 Y 1683 AK 6

7 Y 1684 Peter Bachmann

8 Y 1686 AK 2 Y

13 Range-safety craft (5 type 369, 1 type 909)

1 Y 827 KW 15

2 Y 830 KW 16

3 Y 845 KW 17

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	78			
					4 Y 832 KW 18
					5 Y 846 KW 20
					6 Y 857 H 11
					14 Twin-hull oil-recovery ships (type 738)
					1 Y 1643 Bottsand
					2 Y 1644 Eversand
					15 Torpedo recovery vessels (type 430A)
					1 Y 851 TF 1
					2 Y 852 TF 2
					3 Y 853 TF 3
					4 Y 855 TF 5
					50 Frigate
					1 Thetis class (type 420)
					1 P 6053 Hermes
					2 P 6055 Triton
					3 P 6056 Theseus

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	78			5 SS (Conventional attack-torpedo, patrol)
					1 Type 206
					1 S 192 U 13
					2 S 193 U 14
					3 S 198 U 19
					4 S 199 U 20
					5 S 170 U 21
					6 S 176 U 27
					2 Type 206A
					1 S 194 U 15
					2 S 195 U 16
					3 S 196 U 17
					4 S 197 U 18
					5 S 171 U 22
					6 S 172 U 23
					7 S 173 U 24
					8 S 174 U 25
					9 S 175 U 26
					10 S 177 U 28
					11 S 178 U 29
					12 S 179 U 30
					3 Type 205
					1 S 188 U 9
					2 S 189 U 10
					3 S 190 U 11
					4 S 191 U 12
					4 Type 209
					1 1500
					2 1200
					5 Type 207 Class

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	78			

1 Manned

1 Space vehicles

- 1 Hermes
- 2 Saenger Spaceplane

2 Space Station

- 1 Columbus

3 Space Lab

- 1 D1
- 2 D2
- 3 D3
- 4 IML 1

2 Unmanned

1 Communication satellite

- 1 DFS-Kopernikus
- 2 Artemis
- 3 DRS

5 Meteorology satellite

- 1 Atmos
- 2 Azur
- 3 X-SAR
- 4 ERS
- 5 POEM

7 Imaging Radar Surveillance Satellite

- 1 Rosat

13 Science satellite

- 2 Ulysses
- 3 Galileo
- 4 Soho & Cluster
- 5 Eureka
- 6 Astro-SPAS
- 7 HST
- 8 Mars-94/96
- 9 ISO
- 10 Huygens/Cassini
- 11 Giotto
- 12 Hipparcos
- 13 Compton
- 15 Bremsat

15 Microgravity Satellite

- 1 Spacelab
- 2 Eureka
- 3 SPAS
- 4 Maxus

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	5	78			
					5 Texus
					6 Mikroba
					7 Mir-92
					8 MAUS
					9 Express
					16 Miscellaneous
					1 Shuttle Pallet (SPAS)
					3 Booster
					1 Ariane
					2 Maxus
					3 Saenger

4.2.3.1.6 People's Republic of China

All People's Republic of China platforms have a Kind-field value of 1 and a Country-field value of 45.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	45			

1 Tank

1 Type 59

1 Type 59-I

2 Type 59-II

2 Type 69

1 Type 69-I

2 Type 69-II

3 Type 79

4 Type 80

1 Type 80

2 Type 80-II

5 Type 85-II

1 Type 85-II

2 Type 85-IIA

3 Type 85-11M (w/125mm gun)

4 Type 85-III

6 Type 63 (light amphibious)

7 Type 62 (light)

2 Armored Fighting Vehicle

1 NORINCO YW 531 Armored Personnel Carrier (APC)

2 NORINCO Type 85 (YW 531H) Armored Personnel Carrier (APC)

3 NORINCO YW 534 Armored Personnel Carrier (APC)

4 NORINCO Type 77 (M1974) Armored Personnel Carrier (APC)

5 NORINCO Type WZ 501 Infantry Fighting Vehicle (IFV)

6 NORINCO WZ 551 Armored Personnel Carrier (APC)

7 NORINCO Type WZ 523 Armored Personnel Carrier (APC)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	45			

4 Self-propelled Artillery

- 1 Type 54-1 122mm SP Howitzer
- 2 Type 83 152mm SP Gun-Howitzer
- 3 Type 81 122mm Multiple Rocket Launcher (MRL)
- 4 Type 63 130mm Multiple Rocket Launcher (MRL)
- 5 Type 87 253mm Mine Clearing System (MRL)
- 6 Type 74 284mm Minelaying Rocket System
- 7 Type 75 105mm Recoilless Rifle
- 13 SY-1 (Styx) ASCM launcher
- 14 YJ-1/C-802/CSS-N-8 Saccade ASCM launcher
- 15 CSS-8 (M-7) surface-to-surface missile launcher

5 Towed Artillery

- 1 Type 54 122mm Howitzer
- 2 Type 59 130mm Gun
 - 1 Type 59
 - 2 Type 59-1
- 3 Type 54 152mm Howitzer
- 4 Type 66 152mm Gun-Howitzer
- 5 Type WA 021 (WAC 21) 155mm Gun-Howitzer
- 6 Type 63 107mm Multiple Rocket Launcher (MRL)
- 7 Type 65 82mm Recoilless Rifle
- 11 Type 55 57mm Anti-Tank Gun (ATG)
- 12 Type 54 76mm ATG
- 13 Type 56 85mm ATG
- 14 Type 73 100mm ATG
- 15 Type 86 100mm ATG
- 16 HY-series ASCM launcher
 - 1 HY-1/CSSC-2 Silkworm launcher

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	45			2 HY-2/CSSC-3 Seersucker launcher
					17 C-801/YJ-1/CSS-N-4 Sardine launcher
					6 Small Wheeled Utility Vehicle (0 - 1.25 tons)
					1 BJ212 4x4
					7 Large Wheeled Utility Vehicle (greater than 1.25 tons)
					1 Jiefang CA-10
					2 Jiefang CA-30 6x6 2500kg cargo/utility truck
					1 CA-30
					2 CA-30A
					10 Mortar
					1 100 mm type 71 mortar
					2 120 mm type 55 mortar
					3 160 mm type 56 mortar
					28 Air Defense/Missile Defense Unit Equipment
					1 HQ-2/CSA-1 SAM System
					1 Battalion C3 Vehicle
					2 HQ-2 Launcher
					1 HQ-2 Launcher (standard)
					2 HQ-2B SP Launcher (tracked)
					3 Gin Sling Engagement Radar
					1 Gin Sling A
					2 Gin Sling B
					2 HQ-61/CSA-2 SAM System
					1 Battery Command Post Vehicle
					2 HQ-61 Twin-Rail Launcher Vehicle
					3 HQ-61 Engagement Radar
					3 LY-60 SAM System
					1 LY-60 Battery C3 Vehicle
					2 LY-60 5-Round SP Launcher
					3 LY-60 Engagement Radar Vehicle
					4 LY-60 Surveillance Radar Vehicle
					4 Self-Propelled VSHORAD Gun/Missile System
					1 PL-9 SAM System (quad-rail)
					2 HN-5C SAM System
					5 Towed VSHORAD Gun/Missile System
					1 Type 59 57mm AA Gun (similar to CIS S-60)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	45			
				2	NORINCO 37mm AA Guns
				1	Type 55
				2	Type 65 (twin)
				3	Type 74 (twin)
				4	Type P793 (twin)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	45			

1 Fighter/Air Defense

1 Shenyang F-6 (Farmer)

2 Xien J-7 (Fishbed)

1 J-7 II

2 J-7 E

3 J-7 / F-7 III

3 Shenyang J-8 (Finback)

1 J-8 I Finback A

2 J-8 II Finback B

4 Chengdu Aircraft Industrial Corp. J-9

2 Attack/Strike

2 Nanchang Q-5 (Fantan)

1 Q-5

2 Q-5I

3 Q-5IA

4 Q-5 II

5 A-5C Fantan

4 Xian Aircraft Company JH-7

3 Bomber

1 Harbin H-5 (B-5) Beagle

2 Xian H-6 (B-6) Badger

1 B-6 Badger A

2 B-6D Badger (ASM platform)

4 Cargo/Tanker

1 Shaanxi Aircraft Company Y-8

1 Y-8A (helicopter carrier)

2 Y-8E (drone carrier)

2 Xian Aircraft Company Y-7

1 Y-7 (cargo)

2 Y-7H-500 (cargo)

5 ASW/Patrol/Observation

1 Harbin Aircraft Manufacturing Corp. SH-5

2 Shannxi Aircraft Company Y-8X

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	45			
			21	Utility helicopter	
			1	Changhe Aircraft Factory Z-8	
			40	Trainer	
			1	Chengdu Aircraft Industrial Corp. JJ-5	
			2	Changdu Aircraft Industrial Corp. JJ-7/FT-7	
			3	Guizhou Aviation Industry Corp JJ-7	
			4	Nanchang Aircraft Manufacturing Company CJ-6	
			1	CJ-6A	
			2	CJ-6B	
			5	Nanchang AMC / PAK K-8	
			57	Non-Combatant Commercial Aircraft	
			1	Passenger Airline	
			1	Harbin Aircraft Manufacturing Corp. Y-12(I)	
			2	Harbin Aircraft Manufacturing Corp. Y-12 (II)	
			3	Harbin Aircraft Manufacturing Corp. Y-12 (IV)	
			4	Shaanxi Aircraft Company Y-8B	
			5	Shaanxi Aircraft Company Y-8C	
			6	Xian Aircraft Company Y7-100	
			7	Xian Aircraft Company Y7-100C	
			8	Xian Aircraft Compnay Y7-200	
			9	Xian Aircraft Company Y7-200B	
			2	Agriculture	
			1	Nanching Aircraft Manufacturing Company N-5A	
			2	Harbin Aircraft Manufacturing Corp. Y-11B (I)	
			3	WSK-PZL Mielec M-18 Dromader	
			3	Helicopter	
			1	Harbin Aircraft Co. Z-9/Z-9A (Eurocopter AS 365N2)	
			5	Special Purpose	
			1	Shaanxi Aircraft Company Y-8F (livestock carrier)	
			2	Shaanxi Aircraft Company Y-8H (aerial survey)	
			3	Xian Aircraft Company Y-7 (cargo)	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45	4		Guided Missile Destroyer (DDG)
			1		Luhu (Type 052)
			1		112 Luhu
			2		Luda (Type 051)
			1		Jinan
			2		Xian
			3		Yinchuan
			4		Xinging
			5		Kaifeng
			6		Dalien
			7		Nanjing
			8		Hefei
			9		Chongqing
			10		Zunyi
			11		Changsha
			12		Nanning
			13		Nanchang
			14		Guilin
			15		Zangjiang
			16		Zhuhei
			6		Guided Missile Frigate (FFG)
			1		Jianghu (Type 053)
			1		Chang De
			2		Shaoxing
			3		Nantong
			4		Wuxi
			5		Huayin
			6		Zhenjiang
			7		Xiamen
			8		Jiujiang
			9		Nanping
			10		Jian
			11		Changzhi
			12		Ningpo
			13		Jinhua
			14		Dandong
			15		Tinashan
			16		Maoming
			17		Yibin
			18		Shaoguan
			19		Anshun
			20		Zhaotong
			21		Jishao
			22		Zigong
			23		Kangding
			24		Dongguan
			25		Shantou

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			
				2	Jianghu II (Type 053)
				1	Siping
				3	Jianghu III
				1	Huangshi
				2	WuHu
				4	Jianghu IV
				1	Zhoushan
				5	Jiangwei
				1	Anqing
				2	Huainan
				3	Huaibei
				4	Tongling
				6	Jiavgnan (Type 065)
				1	Nanchong
				2	Dongchuan
				7	Chengdu (Type 01)
				1	Chengdu
				2	Pingxiang
				8	Jiangdong (Type 053K)
				1	Yingtang
			7		Light/Patrol Craft
				1	Huang class Type 037/2 (fast attack missile)
				1	770
				2	Houxin class (fast attack missile)
				1	751-758
				3	Hola class (fast attach missile)
				1	5100
				4	Hegu/Hoku class Type 024 (fast attack missile)
				5	Haijui class (fast attack patrol)
				1	688
				2	693
				3	694
				4	697
				6	Hainan class Type 037 (fast attack patrol)
				1	267-285
				2	290
				3	302
				4	305
				5	609

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			6 610
					7 622
					8 628
					9 636-698
					10 689-692
					11 695
					12 696
					13 698
					14 699
					15 701
					16 702
					17 707
					18 723-730

7 Shanghai class Type 062 (fast attack gun)

- 1 E227
- 2 301
- 3 321
- 4 N1121
- 5 1127
- 6 3140
- 7 3141
- 8 N3215
- 9 N3313
- 10 N4301
- 11 4324
- 12 9342 et al

8 Huludao class Type 206 (fast attack patrol)

- 1 65
- 2 77
- 3 101
- 4 109

9 Huxin class (river patrol)

- 1 62 et al

8 Mine Countermeasure Ship/Craft

1 Beleijan class (minelayer)

- 1 814

2 Wosao class (minesweeper-coastal)

- 1 4422 et al

3 Fushun class (minesweeper-coastal)

- 1 E303 et al

4 Lienyou class (minesweeper-coastal)

5 Futi class Type 312 (minesweeper-drone)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			

10 Tank Landing Ship

1 Yuting class

1 991

2 Yukan class Type 072

1 927

2 928

3 929

4 930

11 Landing Craft

1 Yudao class (landing ship medium)

2 Yuliang class Type 079 (landing ship medium)

3 Yuling class (landing ship medium)

4 Chinese Type class (landing ship medium)

1 972

2 990 et al

5 Yunnan class Type 067 (landing craft utility)

1 3313

2 3321

3 3344

4 5526

5 7566

6 7568 et al

6 Yuch'in class Type 068/069 (landing craft utility)

1 Y765 et al

14 Hydrofoil

1 Huchuan class Type 025/026 (fast attack-torpedo)

1 205

2 207-209

3 248

4 1247

5 2201

6 2203

7 3206

8 3214

9 6218

10 7230 et al

15 Air Cushion/Surface Effect

1 Jingsah II class

1 452

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			

16 Auxiliary

- 1 Daxin class (training ship)
 - 1 81 Zhenghe
- 2 Dajiang class (submarine support)
 - 1 J121 Changxingdao
 - 2 J122 Chongmingdao
 - 3 J506 Yongxingdao
- 3 Da Dong class (salvage)
 - 1 J304
- 4 Dadao class (salvage)
 - 1 Dadao
- 5 Dalang class (submarine support)
 - 1 J503 Dalang
 - 2 J504
- 6 Dongxiu class (submarine support)
 - 1 U911 Dongxiu
- 7 Dazhi class (submarine support)
 - 1 920 Dazhi
- 8 Hudung class (submarine rescue)
 - 1 403 Haijui
 - 2 512 Haijui
- 9 DSRV (salvage submarine)
- 10 Ten Ting class (salvage)
 - 1 456 Hai Lao
 - 2 520 Hai Lao
 - 3 523 Hai Lao
 - 4 666 Hai Lao
- 11 Kansha class (salvage)
 - 1 Kansha
 - 2 304 Haito
 - 3 403
- 12 Jin Jian Xun 05 class (salvage)
- 13 Qionshe class (attack transport)
 - 1 Y830
 - 2 Y831
 - 3 Y833 et al

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			
				14	Qionshe class (hospital)
				1	Y833
				15	Fuqing class (replenishment oiler)
				1	X575 Taicang
				2	X615 Dongyun
				16	Shengli class (transport oiler)
				1	X620
				2	X621
				17	Fulin class (transport oiler)
				1	X583
				2	X606
				3	X607
				4	X609
				5	X628
				6	X629
				7	X633
				18	Fuzhou class (transport oiler)
				1	X573
				2	X580
				3	X606
				4	X629 et al
				19	Jinyou class (transport oiler)
				1	X622
				2	X625
				3	X675
				20	Leizhou class (transport oiler-light)
				1	N1101 Liezhou et al
				21	Fuzhou class (water transport)
				1	416 Hai Shui
				2	419 Hai Shui
				3	556 Hai Shui
				4	557 Hai Shui
				5	608 Hai Shui et al
				22	Leizhou class (water transport)
				1	412 Hai Shui
				2	555 Hai Shui
				3	558 Hai Shui
				23	Yen Pai class (degaussing)
				1	746 Hai Dzu
				2	863 Dong Qin
				24	Yenka class (degaussing)
				1	745 Hai Dzu

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			2 Hai Dzu
				25	Yen Fang class (degaussing)
				1	950 Hai Dzu
				2	951 Hai Dzu
				26	Haibing class (icebreaker)
				1	101
				2	102
				27	Mod Yanha class (icebreaker)
				1	723
				28	Yanha class (icebreaker)
				1	519
				29	Galait class (cargo)
				1	318 Haiyun
				2	600 Haiyun
				30	Dayun class (cargo)
				1	951
				2	952
				31	Yukan class (cargo)
				1	801
				32	Danlin class (cargo)
				1	L191 Hai Leng
				2	L201 Hai Leng
				3	L790 Hai Yun
				4	L795 Hai Yun
				33	Hongqi class (cargo)
				1	Y433
				2	Y528
				3	Y755
				4	Y771
				34	Damen class (cargo)
				1	Y529
				35	Wulai class (cable)
				1	230
				36	Yan Jiu class (ocean tug)
				1	14 Jan Jiu
				37	Gromovoy class (ocean tug)
				1	210 Haito
				2	221 Haito
				3	230 Haito

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			4 231 Haito 5 235 Haito 6 319 Haito 7 T147 Haito 8 T716 Haito 9 T802 Haito 10 T814 Haito et al
					38 Yung Gang (ocean tug)
					39 Hujiu class (tug) 1 T155 2 T711 3 T842 4 T867
					40 Tuzhong class (ocean tug-towing) 1 T154 2 T710 3 T830 4 T890
					41 Harbor tug
					17 Auxiliary, Merchant Marine
					1 Ji Di Hao class (research) 1 Ji Di Hao
					2 Dajiang class (research) 1 R327 2 3 Yuan Wang
					3 Yuan Wang class (space event) 1 1 Yuan Wang 2 2 Yuan Wang
					4 Shijian class (oceanographic research) 1 Shijian 2 Kexueyihao
					5 Hai Ying class (oceanographic research) 1 Ke Xue Yihao 2 Ke Xue Yijao
					6 Kan class (oceanographic research) 1 102 Kan
					7 Shuguang 04 class (oceanographic research) 1 04 Shuguang 2 05 Shuguang 3 06 Shuguang

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			
				4	07 Shuguang
				5	08 Shuguang
			8		Hai Yang class (oceanographic research)
				1	01 Hai Yang
				2	02 Hai Yang
			9		Hai class (oceanographic research)
				1	521 Hai
			10		Dong Fang Hong class (oceanographic research)
				1	Dong Fang Hong
			11		Dadie (intelligence collection)
				1	841
			12		Xing Fengshan class (intelligence collection)
				1	V856 Xing Fengshan
				2	01 Xiangyang Hong
				3	04, 06 Yiangyang Hong
				4	02, 03, 08 Xiangyang Hong
				5	05 Xiangyang Hong
				6	09 Xiangyang Hong
				7	10 Xiangyang Hong
				8	11-16 Xiangyang Hong
			13		Hen Hsi class (missile range instrumentation)
				1	701 Hsun
			14		Nan Hai class (geophysical research)
				1	502 Han Hai
				2	511 Bin Hai
			15		Yenlai class (survey)
				1	K200
				2	226
				3	426
				4	427
				5	943
			16		Yenlun class (survey)
				1	583 Haitse
			17		King Hai class (survey)
				1	701 Hai Sheng
				2	702 Hai Sheng
			18		Kaiboban class (survey)
				1	623 Hai Sheng
			19		Ganzhu class (survey)
				1	K420

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	45			
				20	Yanxi class (survey)
				1	V201
				21	Yannan class (survey)
				1	K982
				2	983

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	45			
			1		SSBN (Nuclear Ballistic Missile)
				1	Xia Class (Type 092)
					1 Xia
			3		SSN (Nuclear Attack - Torpedo)
				1	Han Class
					1 Han 401
					2 Han 402
					3 Han 403
					4 Han 404
					5 Han 405
			5		SS (Conventional Attack - Torpedo, Patrol)
				1	Ming Class (Type 035)
					1 Ming 232
					2 Ming 233
					3 Ming 342
					4 Ming 352
					5 Ming 353
					6 Ming 354
					7 Ming 356
					8 Ming 357
					9 Ming 358

4.2.3.1.7 Sweden Platforms

All Sweden platforms have a Kind-field value of 1 and a Country-field value of 205.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	205	0		Other
			1		Tank
			2		Armored Fighting Vehicle
				1	Stridsfordon 90
				2	Pansarbandvagn 302
			5		Towed Artillery
			28		Air Defense/Missile Defense Unit Equipment
				1	Towed VSHORAD Gun/Missile System
				1	40mm Bofors
					1 L/70 AA Gun
					2 L/60 AA Gun
				2	57mm Bofors

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	205	0		Other
			1		Fighter/Air Defense
			1		SAAB J 35 Draken
			2		SAAB JA 37 Viggen
			3		SAAB JAS 39 Gripen

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	205			
			0		Other
			1		Light/Patrol Craft

4.2.3.1.8 Australia Platforms

All Australian platforms have a Kind-field value of 1 and a Country-field value of 13.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	13	4		Cargo/Tanker
			0		Other
			1		GAF Normad
				1	N22B
				2	N24A

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	13			

6 Guided Missile Frigate (FFG)

0 Other

1 ANZAC Class (Meko 200)

- 1 FFG 150 Anzac
- 2 FFG 151 Arunta
- 3 FFG 152 Warumungu
- 4 FFG 153 Stuart
- 5 FFG 154 Parramatta
- 6 FFG 155 Ballarat
- 7 FFG 156 Toowoomba
- 8 FFG 157 Perth

7 Light/Patrol Craft

0 Other

1 Fremantle Class (Large Patrol Craft)

- 1 P 203 Fremantle
- 2 P 204 Warrnambool
- 3 P 205 Townsville
- 4 P 206 Wollongong
- 5 P 207 Launceston
- 6 P 208 Whyalla
- 7 P 209 Ipswich
- 8 P 210 Cessnock
- 9 P 211 Bendigo
- 10 P 212 Gawler
- 11 P 213 Geraldton
- 12 P 214 Dubbo
- 13 P 215 Geelong
- 14 P 216 Gladstone
- 15 P 217 Bunbury

8 Mine Countermeasure Ship/Craft

0 Other

1 Huon Class (Minehunters-Coastal)

- 1 M 82 Huon
- 2 M 83 Hawkesbury
- 3 M 84 Norman
- 4 M 85 Gascoyne
- 5 M 86 Diamantina
- 6 M 87 Yarra

2 Bay Class (Minehunters - Inshore)

- 1 M 80 Rushcutter
- 2 M 81 Shoalwater

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	13			
				3	COOP Class (Minesweepers - Auxiliary)
				1	1102 Brolga
				2	1185 Koraaga
				3	Y 298 Bandicoot
				4	Y 299 Wallaroo
				11	Landing Craft
				0	Other
				1	LCH Type
				1	L 126 Balikpapan
				2	L 127 Brunei
				3	L 128 Labuan
				4	L 129 Tarakan
				5	L 130 Wewak
				6	L 133 Betano
				50	Frigate
				0	Other
				1	River Class (FF)
				54	Amphibious Assault Ship
				0	Other
				1	Modified Sir Bedivere Class
				1	LSH 50 Tobruk

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	13	4		SSG (Conventional Guided Missile)
			0		Other
			1		Collins Class
			1		S 71 Collins
			2		S 72 Farncomb
			3		S 73 Waller
			4		S 74 Dechaineux
			5		S 75 Sheean
			6		S 76 Rankin

4.2.3.1.9 Republic of Korea Platforms

All Republic of Korea platforms have a Kind-field value of 1 and a Country-field value of 120.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	120			
			1	Tank	
					1 Type 88

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	120	4		Cargo/Tanker
			1		Aircraft Technologies Industries (Airtech) CN-235
				1	CN-235 M
			21		Utility Helicopter
			1		Kawasaki BK 117
			40		Trainer
			1		KTX-1 Yeo-Myoung (Dawn)
			57		Non-Combatant Commercial Aircraft
			1		Passenger Airline
				1	Fokker 1000
				2	CHK-91 Chang-Gong 91 (Blue Sky 91)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	120			

6 Guided Missile Frigate (FFG)

1 Ulsan Class

- 1 FF 951 Ulsan
- 2 FF 952 Seoul
- 3 FF 953 Chung Nam
- 4 FF 955 Masan
- 5 FF 956 Kyong Buk
- 6 FF 957 Chon Nam
- 7 FF 958 Che Ju
- 8 FF 959 Busan
- 9 FF 961 Chung Ju

2 Po Hang Class (Corvette)

- 1 756 Po Hang
- 2 757 Kun San
- 3 758 Kyong Ju
- 4 759 Mok Po
- 5 761 Kim Chon
- 6 762 Chung Ju
- 7 763 Jin Ju
- 8 765 Yo Su
- 9 766 An Dong
- 10 767 Sun Chon
- 11 768 Yee Ree
- 12 769 Won Ju
- 13 771 Je Chon
- 14 772 Chon An
- 15 773 Song Nam
- 16 775 Bu Chon
- 17 776 Dae Chon
- 18 777 Jin Hae
- 19 778 Sok Cho
- 20 779 Yong Ju
- 21 781 Nam Won
- 22 782 Kwan Myong
- 23 783

7 Light/Patrol Craft

1 Pae Ku (PSMM 5) Class (fast attack craft-missile)

- 1 PGM 582 Pae Ku 52
- 2 PGM 583 Pae Ku 53
- 3 PGM 585 Pae Ku 55
- 4 PGM 586 Pae Ku 56
- 5 PGM 587 Pae Ku 57
- 6 PGM 588 Pae Ku 58
- 7 PGM 589 Pae Ku 59
- 8 PGM 591 Pae Ku 51

2 Sea Dolphin Class (fast attack craft-patrol)

- 1 PKM 212-358 series

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	120			

3 Wildcat Class (fast attack craft-missile)
1 PKM 271-72

4 Sea Hawk Class (fast attack craft-patrol)
1 PK 161-189 series

5 Sea Fox Class (fast attack craft-patrol)
1 PK 161-189 series

8 Mine Countermeasure Ship/Craft

1 Swallow Class (minehunter)
1 561 Kang Keong
2 562 Kang Jin
3 563 Ko Ryeong
4 565 Kim Po
5 566 Ko Chang
6 567 Kum Cha

2 US MSC 268 Class (minesweeper-coastal)
1 MSC 551 Kum San
2 MSC 552 Ko Hung
3 MSC 553 Kum Kok

3 US MSC 389 Class (minesweeper-coastal)
1 MSC 555 Nam Yang
2 MSC 556 Ha Dong
3 MSC 557 Sam Kok
4 MSC 558 Yong Dong
5 MSC 559 Ok Cheon

10 Tank Landing Ship

1 Alligator Class (LST)

16 Auxiliary

1 Chun Jee Class (HDA 8000) (AOE)
1 AO 57 Chun Jee
2 AO 53

2 Furseal Class (LCU)
1 72, 73-75-78 Mulkae

3 Surveying Ship
1 801-803, 805, 806 Pusan
2 821 Ch'unghnam
3 831 Kangwon

4 Trials Support Ship
1 Sunjin

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	120			

5 Salvage Ship

- 1 ARS 26 GUMI
- 2 ARS 25 CHANG WON

50 Frigate (including Corvette)

1 Dong Hae Class (Corvette)

- 1 751 Dong Hae
- 2 752 Su Won
- 3 753 Kang Reung
- 4 755 An Yang

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	120			
			5	SS	(Conventional Attack-Torpedo, Patrol)
			1	Chang Bogo	(Type 209) Class
				1	061 Chang Bogo
				2	062 Yi Chon
				3	063 Choi Muson
			7	SSA	(Conventional Auxiliary)
			1	KSS-1	Tolgorae Class (midget submarine)
				1	051-053
			2	Cosmos	Class (midget submarine)

4.2.3.1.10 Democratic People's Republic of (North) Korea Platform

All Democratic People's Republic of (North) Korea platforms have a Kind-field value of 1 and a Country-field of 119.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	119	1		Tank
			1		M1985 Light tank
			4		Self-propelled artillery
			1		170 mm M-1978 SP "Koksan"
			2		240 mm Multiple Rocket Launcher

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	119	6		Guided Missile Frigate (FFG)
			1		Soho Class
			2		Najin Class
			7		Light/patrol Craft
			1		So 1 Class (large patrol craft)
			2		Soju Class (fast attack craft-missile)
			3		Sohung Class (fast attack craft-missile)
			4		Sariwon Class (large patrol craft)
			1	725-27	
			5		Soman Class (large patrol craft)
			6		Taechong I (large patrol craft)
			7		Taechong II (Mayang) (large patrol craft)
			8		Chodo Class (fast attack craft-gun)
			9		Chaho Class (fast attack craft-gun)
			10		Chong-Jin Class (fast attack craft-gun)
			11		Chong-Ju Class (fast attack craft-gun)
			12		Sinpo (Sinnam) Class (fast attack craft-gun)
			13		Ku Song Class (fast attack craft-torpedo)
			14		Sin Hung Class (fast attack craft-torpedo)
			15		Mod Sin Hung Class (fast attack craft-torpedo)
			16		TB 11PA Class (inshore patrol craft)
			17		TB 40A Class (inshore patrol craft)
			18		Modified Fishing Vessels (coastal patrol craft)
			19		High Speed Infiltration Craft (HSIC)
			8		Mine Countermeasure Ship/Craft
			1		Yukto I Class (coastal minesweeper)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	119			
				2	Yukto II Class (coastal minesweeper)
				3	Pipa-Got Class (inshore minesweeper)
			10		Tank Landing Ship
				1	Hungnam Class (LSM)
				2	Hantae Class (LSM)
			11		Landing Craft
				1	Hanchon Class (LCM)
				2	Nampo Class (LCP)
			15		Air Cushion/Surface Effect
				1	Songjong Class (Type I-III) (LCP-hovercraft)
			16		Auxiliary
				1	Depot Ship for Midget Submarine
				1	Soo Gun-Ho
				2	Dong Geon Ae Gook-Ho
				3	Dong Hae-Ho
				4	Chong Seong-Ho Number One
				5	Chong Seong-Ho Number Two
				6	Chong Seong-Ho Humber Three
				7	Hae Gum Gong-Ho
				8	Song Rim-Ho
				2	Surveying Ship
				1	101 Donghae
				2	102 Donghae
				3	201 Sohai
				4	202 Sohai
				3	Coastal Patrol Craft
				1	177
				2	801

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	119			
			5	SS (Conventional Attack-Torpedo Patrol)	
			1	Sang-O class (midget submarine)	
			7	SSA (Conventional Auxiliary)	
			1	North Korean Design (midget submarine)	

4.2.3.1.11 Qatar Platforms

All Qatar platforms have a Kind-field value of 1 and a Country-field value of 178.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	178			

7 Light/Patrol Craft

1 Damsah (Combattante III M) Class (fast attack craft-missile)

- 1 Q01 Damsah
- 2 Q02 AL Ghariyah
- 3 Q03 Rbigah

2 Barzan Class (large patrol craft)

- 1 Q11 Barzan
- 2 Q12 Hwar
- 3 Q13 That Assuari
- 4 Q14 AL Wusail
- 5 Q15 Fateh-AL-Khair
- 6 Q16 Tariq

3 Damen Polycat 1450 Class (coastal patrolcraft)

- 1 Q31-36

4 Fairey Marine Spear Class (coastal patrol craft)

- 1 Q71-95

4.2.3.1.12 Saudi Arabia Platform

All Saudi Arabian platforms have a Kind-field value of 1, and a Country-field value of 189.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	189			
			40	Trainer	
					1 Pilatus Flugzeugwerke SA PC-9
					1 PC-9

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	189			

6 Guided Missile Frigate

1 Madina (Type F 2000S) Class

- 1 702 Madina
- 2 704 Hofouf
- 3 706 Abha
- 4 708 Taif

2 Badr Class (Corvette)

- 1 612 Badr
- 2 614 Al Yarmook
- 3 616 Hitteen
- 4 618 Tabuk

7 Light/Patrol Craft

1 Jaguar Class (fast attack craft-torpedo)

- 1 90 Dammam
- 2 50 Khabar
- 3 10 Maccah

2 Halter Type (coastal patrol craft)

3 Simmoneau 51 Type (inshore patrol craft)

4 Al Siddiq (fast attack craft-missile)

- 1 511 Al Siddiq
- 2 513 Al Farouq
- 3 515 Abdul Aziz
- 4 517 Faisal
- 5 519 Kahlid
- 6 521 Amyr
- 7 523 Taiq
- 8 525 Oqbah
- 9 527 Abu Abaidah

8 Mine Countermeasure/Ship Craft

1 Sandown Class (minehunters-coastal)

- 1 420 Al Jawf
- 2 422 Shaqra
- 3 424 Al Kharj

2 MSC 322 Class (minesweeper/hunter-coastal)

- 1 MSC 412 Addriyah
- 2 MSC 414 Al Quysumah
- 3 MSC 416 Al Wadeah
- 4 MSC 418 Safwa

16 Auxiliary

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	189			1 Mod Durance Class (replenishment ship) 1 902 Boraida 2 904 Yunbou

4.2.3.1.13 Kuwait Platform

All Kuwait platforms have a Kind-field value of 1 and a Country-field value of 121.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	121			

40 Trainer

1 Short Brothers :LC T.MK 52 Toucan
1 T.MK 52

2 Empresa Brasileria de Aeronautica SA EMB-312 Toucan
1 EMB-S312

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	121			
			7		Light/Patrol Craft
				1	OPV 310 Class (large patrol craft)
					1 P301 Inttisar
					2 P302 Aman
					3 P303 Maimom
					4 P304 Mobark
				2	TNC 45 Type (fast attack craft-missile)
					1 P3404 Al Sanbouk
				3	Simmoneau Standard 12 Class (inshore patrol craft)
				4	FPB 57 Type (fast attack craft-missile)
					1 P5702 Istiqlal
				5	Cougar Type (inshore patrol craft)
				6	Al-Shaali Type (inshore patrol craft)

4.2.3.1.14 Oman Platform

All Oman platforms have a Kind-field value of 1 and a Country-field value of 164.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	164			
			7		Light/Patrol Craft
			1		Patrol Ship
				1	A1 AL Mabrukak
			2		AL Waafi (Brooke Marine) Class (fast attack craft-gun)
				1	B4 AL Waafi
				2	B5 AL Fulk
				3	B6 AL Mujahid
				4	B7 AL Jabbar
			3		Seeb (Vosper 25) Class (inshore patrol craft)
				1	B20 Seeb
				2	B21 Shinas
				3	B22 Sadh
				4	B23 Khassab
			4		Dhofar (Province) Class (fast attack craft-missile)
				1	B10 Dhofar
				2	B11 AL Sharqiyah
				3	B12 AL Bat'nah
				4	B14 Mussandam
			5		Tyler-Vortex Type (inshore patrol craft)
				1	Q2
			11		Landing Craft
				1	LCM
				1	C8 Saba AL Bahr
				2	C9 AL Doghas
				3	C10 AL Temsah
				2	LCU
				1	C7 AL Neemran
			55		Amphibious Cargo Ship
				1	Landing Ship-Logistic
				1	L2 Nasar AL Bahr
			58		Combat Stores Ship
				1	Supply Ship
				1	A2 AL Sultana

4.2.3.1.15 Lebanon Platform

All Lebanese platforms have a Kind-field value of 1 and a Country-field value of 123.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	123			

7 Light/Patrol Craft

1 Tracker Mk2 (coastal patrol craft)

2 Aztec Class (coastal patrol craft)

4.2.3.1.16 Iraq Platform

All Iraq platforms have a Kind-field value of 1 and a Country-field value of 102.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	102	2		Armored Fighting Vehicle
			1		EE-3 JARARACA
			2		EE-9 CASCAVELEE - 11URUTRU
			3		EE-11 URUTRU
			3		Self-propelled Artillery
			1		127 mm ASTROS II
			2		262 mm ABABEEL
			3		160 mm mortar

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	102	1		Fighter/Air Defense
			8		Surveillance/C ² (Airborne Early Warning)
			1		Iraqi Air Force Adnan 1
			1		Adnan I

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	102	6		Guided Missile Frigate
			1		Assad Class
				1	F210 Mussa Ben Nussair
				2	F212 Tariq Ibn Ziad
			7		Light/Patrol Craft
			1		Bogomol Class (large patrol craft)
			2		PB 90 Class (coastal patrol craft)
			3		Sawari Class (inshore patrol boat)
			8		Mine Countermeasure Ship/Craft
			1		Nestin Class (minesweeper-inshore)
			16		Auxiliary
			1		Transport Ship
				1	426 Al Zahraa
				2	428 Khawla
				3	429 Balqees
			2		Spasilac Class (salvage ship)
				1	A81 Aka
			3		Diving Tender
			50		Frigate (including Corvette)
			1		Yugoslav Type
				1	507 Ibn Marjid

4.2.3.1.17 Iran Platform

All Iranian platforms have a Kind-field value of 1 and a Country-field value of 101.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	101			

4 Self-propelled Artillery

- 1 320 mm OGHAB Multiple Rocket Launcher
- 2 330 mm SHAHIN Multiple Rocket Launcher
- 3 330 mm NAZEAT

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	101	5	Destroyer (DD)	
			1	Damavand	
			2	Babr	
			6	Guided Missile Frigate (FFG)	
			1	Avland (vosper Mk 5) Class	
			1	71 Alvand	
			2	72 Alborz	
			3	73 Sabalan	
			7	Light/Patrol Craft	
			1	Kaman (Combattante II) Class	
			1	P221 Kaman	
			2	P222 Zoubin	
			3	P223 Khadang	
			4	P226 Falakhon	
			5	P227 Shamshir	
			6	P228 Gorz	
			7	P229 Gardouneh	
			8	P230 Khanjar	
			9	P231 Neyzeh	
			10	P232 Tabarzin	
			2	Parvin (PGM-71) Class (large patrol craft)	
			1	211 Parvin	
			2	212 Bahram	
			3	213 Nahid	
			3	MK II Class (Coastal patrol craft)	
			4	MIG-S-1800 Class (coastal patrol craft)	
			5	MK III Class (coastal patrol craft)	
			6	MIG-G-1900 Class (coastal patrol craft)	
			7	PBI Type (coastal patrol craft)	
			8	Enforcer Type (inshore patrol craft)	
			9	Stewart Type (inshore patrol craft)	
			1	Mahnavi-Hamraz	
			2	Mahnavi-Vahedi	
			3	Mahnavi-Taheri	
			10	Boghammar Craft	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	101			
					11 Boston Whaler Craft (Type I)
					12 HUDONG Class
					1 P3131
					2 P3132
					3 P3133
					4 P3134
					5 P3135
					6 P3136
					7 P3137
					8 P3138
					9 P3139
					10 P3140
					8 Mine Countermeasure Ship/Craft
					1 Cape Class (minesweeper-inshore)
					1 311 Harischi
					2 312 Raizi
					10 Tank Landing Ship
					1 Iran Air Class (LST)
					1 Iran Asir
					2 Iran Ghaydr
					2 Iran Hormuz 24 Class (LST)
					1 24-26
					11 Landing Craft
					1 Rotork Craft (LCU)
					2 MIG-S-3700 Class (LCT)
					3 Iran Hormuz 21 Class (LCT)
					1 21-23
					15 Air Cushion/Surface Effect
					1 Winchester (SR. N6) Class (hovercraft)
					1 01-08
					2 Wellington (BH.7) Class (hovercraft)
					1 101-106
					16 Auxiliary
					1 Replenishment Ship
					1 431 Kharg

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	101			
				2	Hendijan Class (AG) (tenders)
				1	Hendijan
				2	Konarak
				3	Sirik
				4	Geno
				5	Kalat
				6	Genaveh
				7	Savatar
				8	Mogam
				9	Rostani
				10	Mayband
				11	Maqam
				12	Koramshahr
				13	Bamregan
				3	Kangan Class (water tanker)
				1	411 Kangan
				2	412 Teheri
				3	xxx Shahid Marjani
				4	xxx Amir
				4	Delvar Class (support ship)
				1	Chark (AK) (cargo)
				2	Chiroo (AK) (cargo)
				3	Souru (AK) (cargo)
				4	Dilim (AW) (water)
				5	Dayer (AW) (water)
				50	Frigate (including Corvette)
				1	Bayandor Class
				55	Amphibious Cargo Ship
				1	Hengam Class (LSL)
				1	511 Hengam
				2	512 Larak
				3	513 Tonb
				4	514 Lavan
				57	Ammunition Ship
				1	Delvar Class (support ship)
				1	Delvar (AE)
				2	Sirjan (AE)
				58	Combat Stores Ship
				1	Fleet Supply Ship
				1	421 Bandar Abbas
				2	422 Boushehr

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	101			
			5	SS	(Conventional, Attack-Torpedo, Patrol)
			1	901	Tareq
			2	902	Noor
			7	SSA	(Conventional Auxiliary)
			1		Midget Submarine

4.2.3.1.18 Israel Platform

All Israel platforms have a Kind-field value of 1 and a Country-field value of 105.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	105	1		Fighter/Air Defense
			2		Israel Aircraft Industries C-7 Kifr
			1		C-7
			3		I A I Lavi
			4		Cargo/Tanker
			3		Israel Aircraft Industries 707
			1		707-320C
			2		ARAVA IAI-202
			8		Surveillance/C2 (Airborne Early Warning)
			1		707
			2		720
			21		Utility Helicopter
			3		Bell Helicopter Textron Canada Ltd. Twin Two Twelve
			23		Cargo Helicopter
			1		Israel Aircraft Industries Yasur 2000
			1		Yasur 2000
			40		Trainer
			1		Israel Aircraft Industries C-7 Kifr
			1		TC-7
			57		Non-Combatant Commercial Aircraft
			1		Passenger Airline
			1		Israel Aircraft Industries 1125 Astra SP

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	105			

6 Guided Missile Frigate (FFG)

1 Eilat (Saar 5) Class (Corvette)

- 1 501 Eilat
- 2 503 Hanit
- 3 502 Lahav

7 Light/Patrol Craft

1 Aliya (Saar 4.5) (fast attack craft-missile)

- 1 Aliya
- 2 Geoula

2 Hetz (Saar 4.5) (fast attack craft-missile)

- 1 Romat
- 2 Keshet
- 3 Hetz

3 Mivtach (Saar 2) Class (fast attack craft-missile)

- 1 311 Mivtach
- 2 312 Miznag
- 3 313 Mifgav
- 4 321 Eilath
- 5 322 Haifa
- 6 323 Akko

4 Reshef (Saar 4) (fast attack craft-missile)

- 1 Reshef
- 2 Kidon
- 3 Tarshish
- 4 Yaffo
- 5 Nitzhon
- 6 Atsmount
- 7 Moledet
- 8 Komemiut

5 Super Dvora Class (fast attack craft-gun)

- 1 810-821

6 Dabur Class (coastal patrol craft)

11 Landing Craft

1 Ashdod Class (LCT)

- 1 61 Ashdod
- 2 63 Ashkelon
- 3 65 Achziv

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	105			
			4		SSG (Conventional Guided Missile)
				1	Gal (Vickers Type 540) Class
					1 Gal
					2 Tanin
					3 Rahav

4.2.3.1.19 Jordan Platform

All Jordan platforms have a Kind-field value of 1 and a Country-field value of 114.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	114			

2 Attack/Strike

1 Construcciones Aeronauticas CC-04 Aviojet

1 CC-04

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	114			
			7		Light/Patrol Craft
			1		Faysal
				1	Faysal
				2	Han
				3	Hasayu
				4	Muhammed
			2		AL Hussein (Hawk) Class (fast attack craft-gun)
				1	101 AL Hussein
				2	102 AL Hussan
				3	103 Abdullah
			11		Landing Craft
			1		AL Hashim (Rotork) Class (LCU)
				1	AL Hashim
				2	AL Faisal
				3	AL Hamza

4.2.3.1.20 Italy Platform

All Italian platforms have a Kind-field value of 1 and a Country-field value of 106.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	106			

1 Tank

1 Light Tank/Recon

1 Centauro B-1

2 Armored Fighting Vehicle

1 Armored Personnel Carrier (APC)

1 VCC 1/2

2 Fiat 6614

4 Self Propelled Artillery (guns and howitzers)

1 M-109G

2 M-109L

3 M-110A2

5 Towed Artillery (anti-tank guns, guns and howitzers)

1 Model 56 PACK

2 FH-70

10 Mortar

1 120 mm

2 81 mm

28 Air Defense/Missile Defense Unit Equipment

1 SPADA SAM System

1 Detection Center (DC)

1 Operational Control Center (OCC)

2 Search and Interrogation Radar (SIR)

2 SPADA Firing Section

1 Aspide 6-Round Missile Launcher

2 Tracking and Illumination Radar (TIR)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	106	1		Fighter/Air Defense
				1	AMX
				1	AMX-T
				2	MB 339
				3	MB-326
			2		Attack/Strike
			4		Cargo/Tanker
				1	G-222
			20		Attack Helicopter
				1	Agusta Bell 412SP
			21		Utility Helicopter
				1	Agusta A139
				2	Agusta-Bell 206B
				3	Agusta-Bell 212
				4	HA-3F
				5	A-109
				6	A-129
				7	AB-205A
			22		Anti-submarine Warfare/Patrol Helicopter
				1	Agusta Bell 212 ASW
				2	AS-61
				3	ASH-3H

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	106			
			2		Command Ship/Cruiser
				1	C 550 Vittorio Veneto
			4		Guided Missile Destroyer (DDG)
				1	Audace class
				1	D 550 Ardito
				2	D 551 Audace
				2	Animoso class
				1	D 560 Luigi Durand De La Penne
				2	D 561 Francisco Mimbelli
			8		Mine Countermeasure Ship/Craft
				1	Gaeta Class
				1	M5550 Lerici
				2	M5551 Sapri
				3	M5552 Milazzo
				4	M5553 Viesta
				5	M5554 Gaeta
				6	M5555 Termoli
				7	M5556 Alghero
				8	M5557 Numana
				9	M5558 Crotone
				10	M5559 Viareggio
				11	M5560 Chioggia
				12	M5561 Rimini
				2	Adjutant Class
				1	M5504 Castagno
				2	M5505 Cedro
				3	M5509 Gelso
				4	M5516 Platano
				5	M5519 Mandorlo
			12		Light Carrier
				1	C551 Giuseppe Garibaldi
			14		Hydrofoil
				1	Sparviero Class (Hydrofoil-Missile)
				1	P421 Nibbio
				2	P422 Falcone
				3	P423 Astore
				4	P424 Grifone
				5	P425 Cheppio
				6	P426 Condor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	106			

16 Auxiliary

- 1 Etna Class (Replenishment Tanker)
 - 1 Lieut Comdr Erminio Bagnasco
- 2 Stromboli Class
 - 1 A5327 Stromboli
 - 2 A5329 Vesuvio
- 3 Experimental Ship
 - 1 A5325 Raffaele Rossetti
 - 2 A5320 Vincenzo Martellotta
 - 3 P492 Barbara
 - 4 A5305 Murena
- 4 Barngat Class (Support Ship)
 - 1 A5301 Pietro Cavezzali
- 5 MTC 1011 Class (Ramped Transport)
 - 1 A5347 Gorgona
 - 2 A5348 Tremiti
 - 3 A5349 Capera
 - 4 A5351 Pantelleria
 - 5 A5352 Lipari
 - 6 A5353 Capri
- 6 Pedretti Class (Commando Support Craft)
 - 1 Y499 Alcide Pedretti
 - 2 Y498 Mario Marino
- 7 Men 215 Class (LCVP)
 - 1 MEN 215
 - 2 MEN 216
- 8 SAR CRAFT (Air/Sea rescue)
 - 1 Paolucci
- 9 Men 212 Class (TRV)
 - 1 MEN 212
- 10 Ex-Us LCM
 - 1 MTM 542
 - 2 MTM 543
 - 3 MTM 544
 - 4 MTM 545
 - 5 MTM 546
 - 6 MTM 547
 - 7 MTM 548
 - 8 MTM 549
 - 9 MTM 550
 - 10 MTM 551
 - 11 MTM 552

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	106			
					12 MTM 553
					13 MTM 554
					14 MTM 555
					15 MTM 556
					11 MTM 217 Class (LCMs)
					1 MTM 217
					2 MTM 218
					3 MTM 219
					4 MTM 220
					5 MTM 221
					6 MTM 222
					7 MTM 223
					8 MTM 224
					9 MTM 225
					10 MTM 226
					11 MTM 227
					12 US LCVF Type
					1 MTP 9726
					2 MTP 9731
					3 MTP 9748
					4 MTP 9749
					5 MTP 9750
					6 MTP 9751
					13 MTP 96 Class (LCVP)
					1 MTP 96
					2 MTP 97
					3 MTP 98
					4 MTP 99
					5 MTP 100
					6 MTP 101
					7 MTP 102
					8 MTP 103
					9 MTP 104
					10 MTP 105
					11 MTP 106
					12 MTP 107
					14 Harbor Tanker
					1 GRS Type
					15 Training Ship
					1 A5312 Amerigo Vespucci
					2 A5311 Palinuro
					3 A5378 Aragosta
					4 A5379 Astice
					5 A5380 Mitilo
					6 A5381 Polipo
					7 A5382 Porpora
					8 A5308 Alloro

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	106			
					9 A5302 Caroly
					10 A5313 Stella Polare
					11 A5316 Corsaro II
					12 Cristofore Colombo II
					16 Salvage Ship
					1 A5310 Proteo
					2 A5309 Anteo
					17 Lighthouse Tender
					1 A5364 Ponza
					2 A5366 Levanzo
					3 A5367 Tavolara
					4 A5368 Palmaria
					5 A5383 Procida
					18 Repair Craft (LCT 3 Type)
					1 A5331 MOC 1201
					2 A5332 MOC 1202
					3 A5333 MOC 1203
					4 A5334 MOC 1204
					5 A5335 MOC 1205
					19 Ferry
					1 Tarantola
					20 Water Carrier
					1 A5354 Piave
					2 A5356 Basento
					3 A5357 Bradano
					4 A5358 Brenta
					5 A5359 Bormida
					21 Water Carrier Tug
					1 A5370 MCC 1101
					2 A5371 MCC 1102
					3 A5372 MCC 1103
					4 A5373 MCC 1104
					22 Tug
					1 A5319 Ciclope
					2 A5324 Titano
					3 A5325 Polifemo
					4 A5328 Gigante
					5 A5330 Saturno
					6 A5365 Tenace
					7 A5317 Atlante
					8 A5318 Prometeo
					23 Coastal Tug
					1 Y421 Porto Empedocle
					2 Y422 Porto Pisano

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	106			
					3 Y423 Porto Conte
					4 Y425 Porto Ferraiolo
					5 Y426 Porto Venere
					6 Y413 Porto Fossone
					7 Y416 Porto Torres
					8 Y417 Porto Corsini
					9 Y436 Porto D'ischia
					10 Y443 Riva Trigoso
					11 Y428 Porto Salvo

24 Harbour Tug

- 1 Y403 RP 101
- 2 Y404 RP 102
- 3 Y406 RP 103
- 4 Y407 RP 104
- 5 Y408 RP 105
- 6 Y410 RP 106
- 7 Y452 RP 108
- 8 Y456 RP 109
- 9 Y458 RP 110
- 10 Y460 RP 111
- 11 Y462 RP 112
- 12 Y463 RP 113
- 13 Y464 RP 114
- 14 Y465 RP 115
- 15 Y466 RP 116
- 16 Y468 RP 118
- 17 Y470 RP 119
- 18 Y471 RP 120
- 19 RP 121
- 20 Y473 RP 122
- 21 Y467 RP 123
- 22 Y477 RP 124
- 23 Y478 RP 125
- 24 Y479 RP 126
- 25 Y480 RP 127
- 26 Y481 RP 128
- 27 Y482 RP 129
- 28 Y483 RP 130
- 29 Y484 RP 131
- 30 Y485 RP 132
- 31 Y486 RP 133
- 32 Y487 RP 134

26 Floating Dock

- 1 GO 1
- 2 GO 5
- 3 GO 8
- 4 GO 10
- 5 GO 11
- 6 GO 17
- 7 GO 18A

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	106			
					8 GO 18B
					9 GO 20
					10 GO 22
					11 GO 23
					12 GO 51
					13 GO 52
					14 GO 53
					27 Guardia Costiera-Capitaneria Di porto (Coast Guard)
					1 CP 406
					2 CP 251
					28 Servizio Navale Carabinieri
					1 S500
					2 S400
					29 Servizio Navale Guardia Di Finanza
					1 Gian Maria Paolini
					30 Antonio Zara Class
					1 Antonio Zara P 01
					2 Vezzari P 02
					31 Corrubia & Bigliani Classes
					1 Bigliani G 80
					2 Cavaglia G 81
					3 Corrubia G 90
					4 Guidice G 91
					17 Auxiliary, Merchant Marine
					1 A5303 Ammiraglio Magnaghi
					2 A5306 Mirto
					3 A5307 Pioppo
					18 Utility
					1 Cassiopea Class
					1 P401 Cassiopea
					2 P402 Libra
					3 P403 Spica
					4 P404 Vega
					2 Agave Class
					1 P495 Bambu
					2 P496 Mango
					3 P497 Mogano
					4 P500 Palma

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	106			
				3	Aggressive Class
				1	Storione
				2	Squalo
				50	Frigate (including Corvette)
				1	Alpino class
				1	F 580 Alpino
				2	F 581 Carabinieri
				2	Maestrale class
				1	F 570 Maestrale
				2	F 571 Gricale
				3	F 572 Libeccio
				4	F 573 Scirocco
				5	F 574 Aliseo
				6	F 575 Euro
				7	F 576 Espero
				8	F 577 Zeffiro
				3	Lupo class
				1	F 564 Lupo
				2	F 565 Sagittario
				3	F 566 Perseo
				4	F 567 Orsa
				4	Artigliere (Lupo) class
				1	F 582 Artigliere
				2	F 583 Aviere
				3	F 584 Bersagliere
				4	F 585 Granatiere
				5	Minerva class
				1	F 551 Minerva
				2	F 552 Urania
				3	F 553 Danaide
				4	F 554 Sfinge
				5	F 555 Driade
				6	F 556 Chimera
				7	F 557 Fenice
				8	F 558 Sibella
				6	De Cristofaro class
				1	F 550 Salvatore Todaro
				56	Amphibious Transport Dock
				1	San Giorgio Class (LPDs)
				1	L9892 San Giorgio
				2	L9893 San Marco
				3	L9894 San Giusto

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	106			
			5	SS	(Conventional Attack-Torpedo, Patrol)
			1		Improved Sauro Class
				1	S 522 Salvatore Pelosi
				2	S 523 Giuliano Prini
				3	S 524 Primo Longobrado
				4	S 525 Gazzana Priaroggia
			2		Sauro Class (1081 Type)
				1	S 518 Nazario Sauro
				2	S 519 Fecia Di Cossato
				3	S 520 Leonardo Da Vinci
				4	S 521 Guglielmo Marconi
			3		Toti Class (1075 class)
				1	S 506 Enrico Toti
				2	S 513 Enrico Dandolo

4.2.3.1.21 Bahrain Platform

All Bahrain platforms have a Kind-field value of 1 and a Country-field value of 16.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	16			

7 Light/Patrol Craft

1 AL Manama (FPB 62) Class (fast attack craft-missile)

- 1 50 AL Manama
- 2 51 AL Muharraq

2 Almad EL Fateh (FPB 45) Class (fast attack craft-missile)

- 1 20 Admad El Fateh
- 2 21 Al Jabiri
- 3 22 Abdul Rahman AL Fadel
- 4 23 Al Taweelah

3 AL Riffa (FPB 38) Class (fast attack craft-gun)

- 1 10 AL Riffa
- 2 11 Hawar

4 AL Jarim (FPB 20) Class (fast attack craft-gun)

- 1 30 AL Jarim
- 2 31 AL Jasrah

16 Auxiliary

1 Support Ship

- 1 41 Ajeera
- 2 42 Mashtan
- 3 43 Rubodh
- 4 44 Suwad

4.2.3.1.22 United Arab Emirates Platform

All United Arab Emirates platforms have a Kind-field value of 1 and a Country-field value of 223.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	223			

6 Guided Missile Frigate (FFG)

1 Muray Jip (Lurssen 62) Class (Vorvette)

- 1 P6501 Muray Jip
- 2 P6502 Das

7 Light/Patrol Craft

1 Kawkab Class (coastal patrol craft)

- 1 P561 Kawkab
- 2 P562 Thoaban
- 3 P563 Bani Yas

2 Murbarraz Class (fast attack craft-missile)

- 1 P4401 Murbarraz
- 2 P4402 Makasib

3 Ban Yas (Lurssen TNC 45) Class (fast attack craft-missile)

- 1 P4501 Ban Yas
- 2 P4502 Marban
- 3 P4503 Rodqm
- 4 P4504 Shaheen
- 5 P4505 Sagar
- 6 P4506 Tarif

4 Ardhana Class (large patrol craft)

- 1 P1101 Ardana
- 2 P1102 Zurara
- 3 P1103 Murban
- 4 P1104 Al Ghullan
- 5 P1105 Radoom
- 6 P1105 Ghanadhah

10 Tank Landing Ship

1 LSL/LST

- 1 L5401 Al Feyi
- 2 L5402 Jananah
- 3 L5403 Dayyinah

11 Landing Craft

1 LCM

- 1 Ghagha II

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	223	16	Auxiliary	
			1	Cheverton Type (Tender)	
			1	A271	
			2	A272	
			2	Diving Tender	
			1	D1051	
			3	Support Craft	
			1	Baracuda	

4.2.3.1.23 Yemen Platform

All Yemen platforms have a Kind-field value of 1 and a Country-field value of 237.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	237			

7 Light/Patrol Craft

1 Broadsword Class (coastal patrol craft)

1 141 26 September

2 142 Ramadan

3 143 Sana's

16 Auxiliary

1 Toplivo Class

1 135 (tanker-water)

2 140 (tanker-oil)

4.2.3.1.24 Argentina Platform

All Argentina platforms have a Kind-field value of 1 and a Country-field value of 10.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	10			
			4		Guided Missile Destroyer
				1	Almirante Brown (Meko 360)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	10	5	SS	(Conventional Attack - Torpedo, Patrol)
			1	Santa Cruz	(TR 1700) Class (SS)

4.2.3.1.25 Belgium Platform

All Belgium platforms have a Kind-field value of 1 and a Country-field value of 21.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	21			
			50		Frigate (including Corvette)
				1	Wielingen Class (FF)

4.2.3.1.26 Canada Platforms

All Canada platforms have a Kind-field value of 1 and a Country-field value of 39.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	39			
			5		ASW/Patrol/Observation
				1	CP-140 Arcturus/Aurora
			22		Antisubmarine Warfare/Patrol Helicopter
				1	CH-124 (HELO)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	39	4		Guided Missile Destroyer (DDG)
			1		Iroquis Class (DDG)
			6		Guided Missile Frigate (FFG)
			1		Halifax Class (FFG)
			16		Auxiliary
			1		Provider Class (AOR)
			50		Frigate (including Corvette)
			1		Annapolis Class (FF)
			2		Restigouche Class (FF)

4.2.3.1.27 Denmark Platforms

All Denmark platforms have a Kind-field value of 1 and a Country-field value of 57.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	57			
			7		Light/ Patrol Craft
				1	Willemoes Class

4.2.3.1.28 Egypt Platforms

All Egypt platforms have a Kind-field value of 1 and a Country-field value of 62

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	62			
			7		Light/Patrol Craft
				1	Ramadan Class

4.2.3.1.29 India Platforms

All India platforms have a Kind-field value of 1 and a Country-field value of 99

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	99	2	Attack/Strike	
			1	HAL Jaguar	
			2	HAL Kiran Mk II	
			21	Utility Helicopter	
			1	HAL SA 316 Alouette III	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	99	4		Guided Missile Destroyer (DDG)
			1		Delhi Class
			2		Rajput Class
			6		Guided Missile Frigate (FFG)
			1		Godavari Class
			7		Light/Patrol Craft(PC)
			1		Sukanya Class
			50		Frigate (including Corvette)
			1		Khukri Class

4.2.3.1.30 Japan Platforms

All Japan platforms have a Kind-field value of 1 and a Country-field value of 110

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	110			
			4		Guided Missile Destroyer (DDG)
				1	Kongo Class (DDG)
				2	Tachikaze Class (DDG)
				3	Hatakaze Class (DDG)
			5		Destroyer (DD)
				1	Shirane Class (DD)
				2	Haruna Class (DD)
				3	Asagiri Class (DD)
				4	Hatsuyuki Class (DD)
				5	Minegumo Class (DD)
				6	Takasuki Class (DD)
				7	Yamagumo Class (DD)
			8		Mine Countermeasure Ship/Craft
				1	Souya Class (Minelayer)
				2	Hatsushima Class (Minesweeper)
			50		Frigate (including Corvette)
				1	Abukuma Class (FF)
				2	Yubari Class (FF)
				3	Chikugo Class (FF)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	110			
			5	SS	(Conventional Attack-Torpedo, Patrol)
			1	Harushio Class	(SS)
			2	Yuushio Class	(SS)
			3	Uzushio Class	(SS)

4.2.3.1.31 Libya Platforms

All Libya platforms have a Kind-field value of 1 and a Country-field value of 126

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	126			
			6		Guided Missile Frigate (FFG)
				1	Dat Assawari
			7		Light/Patrol Craft (PC)
			50		Frigate(including Corvette)
				1	Assad Class
				1	Assad AL BIHAR
				2	Assad ELTOUGOUR
				3	Assad AL KHALI
				4	Assad AL HUDUD

4.2.3.1.32 Netherlands Platforms

All Netherlands platforms have a Kind-field value of 1 and a Country-field value of 153.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	153	4	Cargo/Tanker	
			1	Fokker F27	
			21	Utility Helicopter	
			1	SH 14 (Mk27 Lynx)	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	153			
			6		Guided Missile Frigate (FFG)
			1		Tromp Class
			2		Kortenaer Class
			3		Jacob Van Heemskerck Class
			16		Auxiliary
			1		Poolster

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	153	5	SS	(Conventional Attack-Torpedo, Patrol)
			1	Walrus	Class

4.2.3.1.33 Norway Platforms

All Norway platforms have a Kind-field value of 1 and Country-field value of 163.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	163			
			7		Light/Patrol Craft
				1	Snogg Class
			8		Mine Countermeasure Ship/Craft
				1	Vidar Class
			50		Frigate (including Corvette)
				1	Oslo Class

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	163			
			5		SS(Conventional Attack-Torpedo, Patrol)
			1		Modernized Kobben Class (type 207)
			1		Skinna
			2		Skolpen
			3		Stord
			4		Svenner
			5		Kobben
			6		Kunna

4.2.3.1.34 Spain Platforms

All Spain platforms have a Kind-field value of 1 and Country-field value of 198.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	198	4	Cargo/Tanker	
				1	CASA C-212

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	198	6		Guided Missile Frigate (FFG)
			1		Baleares Class
			7		Light/Patrol Craft
			1		Barcelo Class
			50		Frigate (including Corvette)
			1		Descubierto Class

4.2.3.1.35 Switzerland Platforms

All Switzerland platforms have a Kind-field value of 1 and a Country-field value of 206

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	206			

5 Towed Artillery

1 NORICUM GH N-45 155mm gun-howitzer

28 Air Defense/Missile Defense Unit Equipment

1 Towed VSHORAD Gun/Missile System

1 Oerlikon-Contraves 35mm

1 GDF-Series Twin-35mm

2 Skyshield 35 Revolver Gun Mount (RGM)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	2	206			

4 Cargo / Tanker

1 Pilatus PC-6

1 Pilatus PC-6 Turbo Porter

40 Trainer

1 Pilatus PC-7

1 Pilatus PC-7 Turbo Trainer

2 PC-7 Mk II

2 Pilatus PC-9

1 Pilatus PC-9 Turbo Trainer

2 PC-9 Mk II

4.2.3.1.36 Thailand Platforms

All Thailand platforms have a Kind-field value of 1 and a Country-field value of 210.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	210			
			6		Guided Missile Frigate (FFG)
				1	Naresuan Class
				2	Chao Phraya Class

4.2.3.1.37 Turkey Platforms

All Turkey platforms have a Kind-field value of 1 and a Country-field value of 218.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	3	218			
			5		Destroyer (DD)
			7		Light/Patrol Craft
				1	Dogan Class
			50		Frigate (including Corvette)
				1	Yavuz

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	4	218	5	SS (Conventional Attack-Torpedo, Patrol)	1 Modified Guppy III Class

4.2.3.1.38 Yugoslavia Platforms

All Yugoslavia platforms have a Kind-field value of 1 and a Country-field value of 240.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat.</u>	<u>Specific</u>
1	3	240			
			6		Guided Missile Frigate (FFG)
				1	Split/Kotor
			7		Light/Patrol Craft
				1	Koncar Class
			8		Mine Countermeasure Ship/Craft
				1	Silba Class (LCT)
			16		Auxiliary
				1	Spasilac Class (ASR)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat.</u>	<u>Specific</u>
1	4	240			
			5		SS (Conventional Attack-Torpedo, Patrol)
				1	Heroj Class
				2	Sava Class

4.2.3.1.39 South Africa Platforms

All South Africa platforms have a Kind-field value of 1 and a Country-field value of 197.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat.</u>	<u>Specific</u>
1	1	197			
			1		Tank
				1	Olifant
					1 Mk 1
					2 Mk 2
			2		Armored Fighting Vehicle
				1	Rooikat
					1 76 mm
				2	Ratel
					1 20 mm
					2 60 mm
					3 90 mm
			3		Armored Utility Vehicle
				1	BLV
			5		Tower Artillery
				1	G5

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat.</u>	<u>Specific</u>
1	2	197			

1 Fighter / Air Defense

1 Cheetah

1 C
2 D

20 Attack Helicopter

1 Rooivalk

50 Unmanned

1 RPV

1 Seeker
2 Vulture

4.2.3.1.40 Czechoslovakia Platforms

All Czechoslovakia platforms have a Kind-field value of 1 and a Country-field value of 56.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat.</u>	<u>Specific</u>
1	2	56			

1 Fighter / Air Defense

1 Aero L-159

2 Attack / Strike

1 Aero L-39Z Albatros

1 Aero L-39ZO

2 Aero L-39ZA

2 Aero L-59

4 Cargo / Tanker

1 Let L-410 Turbolet

40 Trainer

1 Zlin Z-142

2 Aero L-29 Delphin

3 Aero L-39C Albatros

4 Aero L-59

4.2.3.2 Munitions

4.2.3.2.1 U.S. munitions

All U.S. munitions have a Kind-field value of 2 and a Country-field value of 225.

4.2.3.2.1.1 Other

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	0	225			
			1		Guided
				1	Deadeye 5-in. projectile
			3		Fixed
				1	Mine-clearing torpedo, Bangalore
				1	M1A1
				2	M1A2

4.2.3.2.1.2 Anti-air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	225			

1 Guided

1 AIM-9 Sidewinder

- 1 AIM-9B
- 2 AIM-9D
- 3 AIM-9L/M/S
- 4 AIM-9P
- 5 AIM-9R
- 6 AIM-9X

2 AIM-120 Advanced Medium-Range Air-to-Air Missile (AMRAAM)

- 1 AIM-120A
- 2 AIM-120B
- 3 AIM-120C

4 Falcon

- 1 AIM-4D
- 2 AIM-4F
- 3 AIM-4G
- 4 AIM-26
- 5 AIM-26B

5 MIM-72 Chaparral

6 MIM-23 Hawk C/E/F/G/H

- 1 MIM-23B I-Hawk

7 MLMS

8 AIM-54 Phoenix

- 1 AIM-54A
- 2 AIM-54C

9 Rapier UK

10 FIM-43 Redeye

11 Roland

12 Sea Sparrow

- 1 RIM-7H

13 Sparrow

- 1 AIM-7F
- 2 AIM-7M
- 3 AIM-7P
- 4 AIM-7R (multimode seeker)

15 Stinger

- 1 FIM-92 Stinger A/B/C

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	225			2 Stinger Post 3 Stinger RMP
				16	MIM-104 Patriot 1 PAC-2 2 PAC-3 (ERINT)
				19	ADATS
				20	MIM-14B Nike-Hercules
				21	Theater High-Altitude Area Defense (THAAD)
				27	Standard Missile 1 Standard MR (RIM-66) 1 SM-1 Block 5 MR 2 SM-1 Block 6B 3 SM-2 Block 2 MR 4 SM-2 Block 3 MR 5 SM-2 Block 3A MR 6 SM-2 Block 3B 7 (deleted) 8 SM-2 Block 6 MR 9 (deleted) 2 Standard ER (RIM-67) 1 SM-2 Block 4 2 SM-2 Block 4A
				2	Ballistic 1 3-in, .50 caliber 2 12.7-mm/.50 caliber 1 M2 AP 2 M8 API 3 M20 API-T 4 M2 ball 5 M33 ball 6 M1 incendiary 7 M23 incendiary 3 20-mm 1 M61A1 Vulcan cannon 2 M61A2 Vulcan cannon 3 GAU-4 Vulcan cannon
				3	Fixed 1 Anti-helicopter mine (AHM)

4.2.3.2.1.3 Anti-armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	225			

1 Guided

1 BGM-71 TOW

- 1 BGM-71A/B
- 2 BGM-71C ITOW
- 3 BGM-71D TOW 2
- 4 BGM-71E TOW 2-A
- 5 BGM-71F TOW 2-B

2 Dragon ATGW

- 1 M222 Dragon
- 2 Dragon II
- 3 Dragon III

3 AGM-114 Hellfire

- 1 AGM-114A
- 2 AGM-114B
- 3 AGM-114C
- 4 AGM-114F
- 5 AGM-114K
 - 1 AGM-114K SAL
 - 2 AGM-114K RF

4 AGM-65 Maverick

- 1 AGM-65A
- 2 AGM-65B
- 3 AGM-65D
- 4 AGM-65E
- 5 AGM-65F
- 6 AGM-65G

5 M712 Copperhead Cannon Launched Guided Projectile

6 AAWS-M

7 High Velocity Missile (HVM)

8 Javelin

9 Stinger ATAS

2 Ballistic

1 12.7-mm (.50 Cal)

- 1 M2 AP
- 2 M8 API
- 3 M17
- 4 M20 API-T
- 5 A534 (4 ball & 1 tracer mix)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	225			
				2	20 mm
				1	M39
				2	M53 API
				3	M601 API-T
				4	M775 API-T
				5	M940 MP-T-SD
				6	MK149 Mod 4 APDS
				7	Oerlikon S
				8	PGU-28/B SAP-HE
				9	U.S. Navy Mark 100
				3	25 mm
				1	Oerlikon KBA
				2	M791 APDS-T
				3	M919 APFSDS-T
				4	PGU-20/U API
				5	PGU-32/U, SAPHEI
				6	Mk 96
				4	30 mm
				1	173 Mauser model F APDS-T
				2	GAU-8/A
				3	GPU 5A
				5	66 mm 72 LAW
				6	76 mm
				1	M319, HVAP-T
				2	M331A1, HVAP-DS-T
				3	M331A2, HVAP-DS-T
				4	M339, AP-T
				5	M464, APFSDS-T
				6	M496, HEAT-T
				7	81 mm
				8	84 mm
				1	M136, HEAT
				9	90 mm
				1	M77 AP-T
				2	M82 APC-T
				3	M318 AP-T
				4	M318A1 AP-T
				5	M332A1 HVAP-T
				6	M348 HEAT
				7	M348A1 HEAT
				8	M431 HEAT-T
				9	RCL M67
				10	105 mm
				1	FP105, APFSDS

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	225			2 M392 APDS-T
					3 M392A2 APDS-T
					4 M456 HEAT-T
					5 M456A2 HEAT-T
					6 M662 HEAT-T
					7 M728 APDS-T
					8 M735 APFSDS-T
					9 M774 APFSDS-T
					10 M833 APFSDS-T
					11 M900 APFSDS-T
					12 Olin 105, APFSDS
					13 XM815 HEAT-MP
				11	106 mm RCL40 (M40)
				12	107 mm
				13	120 mm
					1 M829 APFSDS-T
					2 M829A1 APFSDS-T
					3 M830 HEAT-MP-T
					4 Olin 120 APFSDS
					5 Olin 120+ APFSDS
					6 M830A1 HEAT-MP-T
					7 XM943 STAFF
				14	152 mm
					1 M409 Series HEAT-T-MP
				15	155 mm
				16	227-mm rocket
					1 AT2
					2 M77
					3 TGW
					4 SADARM
				20	Hydra 70 Rocket System
				50	Rockeye II Mk 20 cluster weapon
				51	SUU-65/B TAC Munition Dispenser (TMD) Wide Area Antiarmor Munition (WAAM)
			3	Fixed	
				1	Area Denial Artillery Munition (ADAM)
				2	Extended Range Anti-armor Munition (ERAM)
				3	GATOR Anti-armor System

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	225			
				4	XM93 Wide Area Mine (WAM)
				5	M21 Heavy Antitank mine
				6	Off-route Antitank mine
				1	M24
				2	M66
				7	M19 Antitank mine
				8	M15 Antitank mine
				9	M86 Pursuit Deterrent Munition (PDM)

4.2.3.2.1.4 Anti-guided-weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	3	225			

1 Guided

1 Decoys

1 Anti-Radiation Missile Decoy (ARM-D)

2 RIM-72 Sea Chaparral

3 RIM-116A RAM

4.2.3.2.1.5 Antiradar

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	4	225			

1 Guided

1 AGM-88 High-speed Antiradiation Missile (HARM)

1 AGM-88A

2 AGM-88B

3 AGM-88C

2 AGM-45 Shrike

1 AGM-45A

2 AGM-45B

3 AGM-78 Standard ARM

4 AGM-122 Sidearm

1 AGM-122A

6 Stinger

1 Air Defense Suppression Missile (ADSM)

4.2.3.2.1.6 Antisatellite

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	5	225			

1 Guided

1 Asat

4.2.3.2.1.7 Antiship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	225			

1 Guided

1 Harpoon

- 1 AGM-84A
- 2 UGM-84A
- 3 RGM-84A
- 4 AGM-84B
- 5 UGM-84B
- 6 AGM-84C
- 7 UGM-84C
- 8 AGM-84D
- 9 UGM-84D
- 10 AGM-84E
- 11 UGM-84E
- 12 RGM-84E
- 13 AGHM-84F
- 14 UGM-84F
- 15 RGM-84F
- 16 AGM-84G
- 17 UGM-84G
- 18 RGM-84G

5 NT 37F torpedo

- 1 Mod 2
- 2 Mod 3
- 3 NT 37E

8 AGM-142 Popeye

9 AGM-119 Penguin

10 AGM-123 Skipper

- 1 AGM-123A

12 BGM-109B Tomahawk Antiship Missile (TASM)

2 Ballistic

1 5-in .38 caliber

2 5-in .54 caliber

- 1 AAC
- 2 HC
- 3 HE-IR
- 4 HE-PD
- 5 HE
- 6 HE-CVT
- 7 IR
- 8 VT (Variable Time)
- 9 VT-IR (Variable Time, Infrared)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	225			10 VT-RF
				3	76 mm
				1	AAC
				2	HE
				3	HE-PD
				4	VT fragmentation
				5	VT IR
				3	Fixed
				1	DST Mk 36 mine
				2	DST Mk 40 mine
				3	DST Mk 41 mine
				4	DST 115A mine
				5	Mk 52 bottom mine
				1	Mod 1
				2	Mod 2
				3	Mod 3
				6	Mk 55 bottom mine
				1	Mod 2
				2	Mod 3
				3	Mod 5
				4	Mod 6
				5	Mod 7
				7	Mk 57 moored mine
				1	Mod 0
				8	Quickstrike mines
				1	Mk 62
				2	Mk 63
				3	Mk 64
				4	Mk 65
				9	CAPTOR - Encapsulated Torpedo moored mine
				10	Advanced sea mine
				11	Mk 56 Mod 0 moored mine
				12	Mk 67 Submarine Launched Mobile Mine

4.2.3.2.1.8 Antisubmarine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	7	225			

1 Guided

1 Mk 46 torpedo

- 1 Mk 46 Mod 0
- 2 Mk 46 Mod 5 (NEARTIP)
- 3 Mk 46 Mod 7
- 4 Mk 46 Mod 6

2 Mk 48 torpedo

- 1 Mod 4

4 MK37 torpedo

- 1 Mod 0
- 2 Mod 1
- 3 Mod 2
- 4 Mod 3

5 RUR-5A ASROC

6 CASW/SOW

7 SUBROC

- 1 UUM-44A

9 Mk 44 torpedo

10 Mk 48 ADCAP torpedo

- 1 Mod 5 ADCAP
- 2 Mod 6 ADCAP/MODS

11 Mk 50 Advanced lightweight torpedo

- 1 100S
- 2 200S

12 NT 37F

- 1 Mod 2
- 2 Mod 3
- 3 NT 37E

13 HOTTORP torpedo

14 Sea Lance ASW

18 Mk 32 torpedo

- 1 Mod 2

4.2.3.2.1.9 Antipersonnel

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	225	2	Ballistic	
			1	5.56 mm	
					1 M193
					2 M193 Tracer
					4 5.56 x 45
					5 M855
					6 M856
					7 A064
			2	7.62 mm	
					1 .30 Carbine
					2 .308 Winchester
					3 .30-06 Springfield
					4 M60
					5 M14
					6 M16
					7 A141
			3	9.0 mm	
					1 .380 Auto
					2 Browning Short
					3 Parabellum
					4 Winchester Magnum
			5	12.7 mm	
					1 .50 Spotting rifle
					2 .50 Browning MG
					3 A534
			7	90 mm	
					1 M580 APERS-T
			8	105 mm	
					1 M336 canister
					2 M377 canister
					3 M494 APERS-T
					4 M546 APERS-T
			9	152 mm	
					1 M625A1 cannister (flechettes)
			11	.357	
					1 Magnum
			12	.38 Cal	
					1 Auto
					2 Super Auto
					3 Special

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	225		13	.45
				1	Auto Colt
				50	BLU-97 Submunition
				1	BLU-97A
				2	BLU-97B
				51	ISCB-1 Area Denial Cluster Weapon
			3		Fixed
			1		Bounding mines
			1		M16
			2		M16A1
			3		M16A2
			4		M2A4
			2		Claymore mine
			3		M15 heavy AT mine
			4		M19 nonmetallic AT mine
			5		M21 heavy AT mine
			6		M741 scatterable AT mine
			7		M718 scatterable AT mine
			8		M75 scatterable AT mine
			9		Nonmetallic "Toe Popper" mine
			1		M14
			10		M731 scatterable mine
			11		M692 scatterable mine
			12		M74 scatterable mine
			13		M1 one-gallon chemical mine
			14		M18A1 mine
			15		M23 chemical-agent mine
			16		M26 mine

4.2.3.2.1.10 Battlefield Support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>	<u>Extra</u>
2	9	225				

1 Guided

1 AGM-86 Air Launched Cruise Missile (ALCM)
2 AGM-86C

3 MGM-52C Lance

7 AGM-62 Walleye

8 SRAM-A

1 AGM-69A
2 AGM-69B

9 SLAM

1 AGM/RGM 84E

10 Advanced Cruise Missile

1 AGM-129A

12 AGM 130

1 AGM-130A
2 AGM-130C

13 Boeing 120-mm Fiber Optic Mortar Projectile (FOMP)

14 Mk-82

1 GBU-12 Mk 82 500-lb

2 .10 sec delay
3 .25 sec delay

15 Mk-84 bomb

1 GBU-15 Glide Bomb
2 GBU-24A/B Glide Bomb
3 PAVEWAY II laser-guided
4 GBU-10 Mk 84 2000-lb
 1 Impact fuse
 2 .10 sec delay
 3 .25 sec delay
5 Mk-84 GAMS
6 GBU-31A JDAM

16 Paveway III

1 GBU-24A/B Mk 109/B 2000-lb pen Bm
2 GBU-24B Mk 84 2000-lb HE bomb
3 GBU-28B (BLU-113/B)

17 Army TACMS

1 M39
2 Block IA

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	225			
					3 Block II
					4 Block IIA
					18 Mk-83 1000-lb LGB
					1 GBU - 16Mk 83
					2 Mk 13/18
					3 GBU-32 JDAM
					19 Tomahawk
					1 BGM - 109C (TLAM-C)
					2 BGM - 109D (TLAM-D)
					3 Tactical Tomahawk Penetrator Variant Mk14
					4 Tactical Tomahawk Penetrator Variant Mk45 Mod1
					20 BLU-109/B Bomb
					1 GBU-10G
					2 GBU-10H
					3 GBU-10J
					4 GBU-24A
					5 GBU-27A
					6 GBU-15(V)-31
					7 GBU-15(V)-32
					8 GBU-31B JDAM
					21 AGM-154 Joint Standoff Munition
					1 AGM-154A (w/BLU-97 CEM)
					2 AGM-154B (w/BLU-108 SFW)
					3 AGM-154C (unitary w/BLU-111)
					22 Wind-Corrected Munitions Dispenser (WCMD)
					1 WCMD with Gator mines (BLU-91/92)
					2 WCMD with Combined Effects Munition (BLU-97/B)
					3 CBU-105 (WCMD w/BLU-108 SFW)
					23 Low Cost Autonomous Attack System (LOCAAS)
					2 Ballistic
					1 20 mm
					1 M39
					2 M56 HEI
					3 M56A3 HE/I
					4 M210 HEI
					5 M242 HE-I-T
					6 M246 HEIT-SD
					7 M246 HEI-T
					8 M940 MPT-SD
					9 Mk 149 (Mod2, 4) CIWS
					2 25 mm
					1 792 HE-I-T
					2 PGU-22/25 HE-I

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	225			

3 30 mm

1 M789 HEDP

4 40 mm

1 Grenade cartridges
2 M433 HEDP
3 M397 Airburst
4 M397A1 Airburst
5 M381 HE
6 M386 HE
7 M406 HE
9 M441 HE
10 M576 Buckshot
11 M583 White star parachute
12 M583A1 White star parachute
13 M585 Star cluster
14 M651 Tactical CS
15 M661 Green star parachute
16 M662 Red star parachute
17 M676 Yellow smoke canopy
18 M680 White smoke canopy
19 M682 Red smoke canopy
20 M713 Red ground smoke marker
21 M715 Green ground smoke marker
22 M716 Yellow ground smoke marker

5 60 mm

1 M49A4 HE bomb
2 M49A5 HE bomb
3 M83A3 illuminating bomb
4 M302A2 smoke bomb
5 M720 HE bomb

6 66 mm rocket

7 76 mm

1 M352 HE
2 M361 smoke
3 M361A1 smoke
4 M363 HE

8 81 mm

1 M43A1 HE bomb
2 M43A1B1 HE bomb
3 M57 smoke WP bomb
4 M57A1 smoke WP bomb
5 M301A1 illuminating bomb
6 M301A2 illuminating bomb
7 M301A3 illuminating bomb
8 M362 HE bomb
9 M362A1 HE bomb

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	225			
					10 M370 smoke bomb
					11 M374 HE bomb
					12 M374A2 HE bomb
					13 M374A3 HE bomb
					14 M375 smoke bomb
					15 M375A1 smoke bomb
					16 M375A2 smoke bomb
					17 M445 training bomb
					9 90 mm
					1 M71 HE
					2 M71 A1 HE-T
					3 M313 smoke
					4 M313C smoke
					10 105 mm
					1 M1 HE
					2 M60 Agent H/HD
					3 M60 smoke
					4 M84 smoke
					5 M314 illumination
					6 M314A3, illuminating cartridge
					7 M327 HEP/HEP-T
					8 M360 Agent GB
					9 M393 HEP-T
					10 M413 HE
					11 M416 smoke WP
					12 M444 HE
					13 M548 HERA
					14 M629 tactical CS
					15 M657 HE-T
					16 M760 HE
					17 M913 RAP
					18 XM872 KE
					11 120 mm
					1 M933HE
					2 M934HE
					3 M57 HE
					4 M68 WP
					5 M929 WP
					6 M91 Illumination
					7 M930 Illumination
					12 127 mm (5.0 in)
					1 Zuni rocket
					13 152 mm
					14 155 mm
					1 BGD155C ICM
					2 M107 HE

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	225			
					1 Variable time
					2 Point detonating
					3 M483A1 HE DP (ICM)
					4 M485 illumination
					5 M485A1 illumination
					6 M485A2 illumination
					7 M549 HE RA
					8 M549A1 HE RA
					9 M864 BB ICM
					10 M449 APICM
					11 M731 FASCAM ADAM
					12 M741
					13 M116A1 HC Smoke
					14 M825 WP
					15 203 mm
					1 M106 HE
					2 M404 HE/ICM
					3 M422 nuclear
					4 M426 Agent GB
					5 M509 HE/ICM
					6 M509 A1, HE/ICM
					7 M650 HERA
					8 M753 nuclear
					16 227 mm rocket
					18 107 mm
					1 M328 smoke bomb
					2 M328 A1 smoke bomb
					3 M329 A1 HE bomb
					4 M329 A2 HE bomb
					5 M335 illuminating bomb
					6 M335 A2 illuminating bomb
					7 M630 tactical CS bomb
					19 7.62 mm
					1 A131 (4 Ball & 1 Tracer Mix)
					2 M62 (4 Ball & 1 Tracer)
					3 M80
					4 A131
					20 12.7 mm
					1 M2 ball
					2 M17 tracer
					3 M33 ball
					4 A541 (4 Ball & 1 Tracer mix)
					21 70 mm (2.75 in) rocket
					1 M 151 HE
					2 M 255 flechette
					3 M 261 submunitions

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	225			4 M 262 5 M229 HE
				22	175 mm 2 1 M437A1 HE 2 M437A2 HE
				23	165 mm 1 HEP
				40	M76 vehicle smoke grenade
				41	M243 smoke grenade
				42	M250 smoke grenade
				43	M257 grenade 1 L8A1/A3 red phosphorous smoke grenade 2 L8A1/A3 WP smoke grenade
				44	M545 universal fragmentation grenade
				45	M560-series antipersonnel fragmentation grenades
				46	Ring Airfoil Grenade (RAG)
				50	B28 nuclear bomb 1 B28 EX 2 B28 FI 3 B28 IN 4 B28 RE 5 B28 RI
				51	B43 nuclear bomb
				52	B53 nuclear bomb
				53	B57 nuclear bomb
				54	B61 nuclear bomb 1 mod O 2 mod 1 3 mod 2 4 mod 3 5 mod 4 6 mod 5

² The M107 175-mm gun is no longer in service with the U.S. Army but is still used by some other nations.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	225			
				55	B83 nuclear bomb
				56	BLU-73/B FAE Bomb
				57	BLU-109/B Bomb
				8	BLU-109/B Low Drag
					1 Impact fuse
					2 .10 sec delay
					3 .25 sec delay
				58	CBU 15
				59	CBU 52
				60	CBU-55
				1	CBU-55/B
				2	CBU-72
				61	CBU 58
				62	CBU 71
				63	CBU 75
				64	CBU 87
				1	CBU-87/B (CEM)
				66	CBU 89
				67	CBU-97/B
				68	Direct Airfield Attack Combined Munition Weapon (DAACM)
				69	Durandal
				70	M117 GP bomb
				1	M117R
				71	Mk-7 Dispenser
				1	CBU-78/B Gator mines (USN)
				2	CBU-59/B APAM
				72	Mk-81
				1	Mk-81 Low Drag General Purpose
				2	Mk-81 Snakeye
				73	Mk-82
				1	Mk-82 air inflatable retard
					1 Impact fuse
					4 Proximity fuse
				2	Mk-82 Low Drag General Purpose

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	225			<ul style="list-style-type: none"> 1 Impact fuse 2 .10 sec. delay 3 .25 sec. delay
					<ul style="list-style-type: none"> 3 MK-82 Snakeye <ul style="list-style-type: none"> 1 Impact fuse 4 Proximity fuse
					4 BLU-111/B
					74 Mk-83 <ul style="list-style-type: none"> 1 BLU-110/B
					75 Mk-84 <ul style="list-style-type: none"> 1 Mk-84 air inflatable retard <ul style="list-style-type: none"> 1 Impact fuse 4 Proximity fuse 2 MK-84 Low Drag General Purpose <ul style="list-style-type: none"> 1 Impact fuse 2 .10 sec. delay 3 .25 sec delay
					76 Sensor Fused Weapon (SFW)
					77 165mm HEP
					78 Napalm
					79 Mine Clearing Lane Charge
					80 MLRS Rocket <ul style="list-style-type: none"> 1 M26 2 M28A1
					81 5.56 MM <ul style="list-style-type: none"> 1 M855 Ball 2 M856 Tracer 3 A064 (4 ball & 1 tracer mix)
					82 M87 mine canister
					3 Fixed <ul style="list-style-type: none"> 1 SLAM

4.2.3.2.1.11 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	10	225	1	Guided	
			1	AGM-86B ALCM	
			4	Tomahawk	
			1	BGM-109A (TLAM-N)	
			7	LGM-30G Minuteman III	
			8	MGM-118 Peacekeeper	
			9	UGM-73 Poseidon	
			10	UGM-93A Trident (II)	

4.2.3.2.1.12 Directed Energy (DE) Weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	12	225	1	Point Effect DE Weapon	
			1	Laser Weapon	
			1	Chemical Oxygen Iodine Laser (COIL)	
			2	Area Effect DE Weapon	
			1	High Power Microwave (HPM) Weapon	

4.2.3.2.2 C.I.S. munitions

All C.I.S. munitions have a Kind-field value of 2 and a Country-field value of 222.

4.2.3.2.2.1 Anti-air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	222	1	Guided	
					1 AA-1 Alkali
					2 AA-2 Atoll
					1 AA-2C
					2 AA-2D
					3 AA-3 Anab
					1 AA-3, IR
					2 AA-3, radar
					5 AA-5 Ash
					1 AA-5, IR
					2 AA-5, radar
					6 AA-6 Acrid
					1 AA-6, IR
					2 AA-6, radar
					7 AA-7 Apex
					1 AA-7, IR
					2 AA-7, radar
					8 AA-8 Aphid
					9 AA-9 Amos
					1 AA-9, inertial
					2 AA-9, command update
					3 AA-9, radar
					10 AA-10 Alamo
					1 AA-10A, short burn radar
					2 AA-10B, short burn, IR
					3 AA-10C, long burn radar
					4 AA-10D, long burn, IR
					11 AA-11 Archer
					12 AA-X-12
					14 SA-2 Guideline
					2 SA-2b Guideline Mod 1
					3 SA-2d Guideline Mod3
					4 SA-2f Guideline Mod5

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	222			
				16	SA-4 Ganef
					1 SA-4A
					2 SA-4B
				17	SA-5 Gammon
					1 SA-5A
					2 SA-5B
					3 SA-5C
				18	SA-6 Gainful
					1 SA-6A
					2 SA-6B
				19	SA-7 Grail
					1 SA-7A
					2 SA-7B
					3 SA-7B (Spetsnaz mod)
					4 SA-7C
				20	SA-8 Gecko
					1 SA-8A mod 0
					2 SA-8B mod 1
				21	SA-9 Gaskin
				22	SA-10 Grumble
					1 SA-10a Grumble Mod 0
					2 SA-10b Grumble Mod 1
					3 SA-10c Grumble Mod 2
				23	SA-11 Gadfly
				24	SA-12 Gladiator/Giant
					1 SA-12A Gladiator SAM
					3 SA-X-12B Giant SAM
					4 SA-X-12B Giant SAM (rail w/ SS-24)
				25	SA-13 Gopher
					1 Strela 10M2
					2 Strela 10M3
				26	SA-14 Gremlin
				27	SA-15 Gauntlet
				28	SA-16 Gimlet
				29	SA-17 Grizzly
				30	SA-18

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	222		31	SA-19 Grison 1 SA-N-11
				32	SA-N-1 Goa (M-1 Volga-M)
				33	SA-N-3 Goblet 1 SA-N-3 Mod 0 2 SA-N-3B Mod 1
				34	SA-N-4 (OSA-M)
				35	SA-N-5 Grail (Strela 2)
				36	SA-N-6
				37	SA-N-7 Gadfly (Smerch/Shtil)
				38	SA-N-8 Gremlin (Strela 3)
				39	SA-N-9 Tor-M/Klinok
				40	SA-N-11 (9M311)
				41	SA-3 Goa

2 Ballistic

- 1 12.7 mm
- 2 14.5 mm
 - 1 API
 - 2 API-T
 - 3 I-T
- 3 23 mm
 - 1 NS HE-I-T OZT
 - 2 NS AP-I BZ
 - 3 VYa HE-I-T OZT
 - 4 VYa AP-I BZ
- 5 25 mm
 - 1 M1940 HE-I-T UOZR-132
 - 2 M1940 AP-T UZR-132
 - 3 2-M3
 - 4 2-M8
- 6 30 mm
 - 1 BR-83 AP-T
 - 2 OF-83D HE

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	222			
				7	57 mm
				8	76 mm
				9	85 mm
				10	100 mm
				11	130 mm
					1 SM-4-1
				12	37 mm

4.2.3.2.2.2 Anti-armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	222			

1 Guided

3 AT-1 Snapper

4 AT-2 Swatter

1 Swatter A/B (radio command)

2 Swatter C (SACLOS)

5 AT-3 Sagger

1 Sagger (MCLOS)

6 AT-4 Spigot

1 Spigot A

2 Spigot B

7 AT-5 Spandrel

8 AT-6 Spiral

9 AT-7 Saxhorn

10 AT-8 Songster

11 AT-9

12 AT -10 Stabber

13 AT-11 Sniper

14 AT-12

2 Ballistic

1 23 mm

2 30 mm

3 64 mm

1 (w/ RPG-18 light anti-armor weapon)

4 73 mm

1 HEAT FS

5 76 mm

6 80 mm

7 82 mm

1 BK-881 HEAT

2 BK-881M HEAT

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	222			
				8	85 mm 1 HEAT
				9	107 mm
				10	115 mm 1 HEAT-FS 2 HVAPFSDS
				11	125 mm 1 APFSDS-T BM-9 2 APFSDS-T BM-12 3 HEAT-FS BM-14m 4 HVAPFSDS
				12	BRAB-200DS HE AP
				13	BRAB-220 HE AP
				14	BRAB-500 HE AP
				15	BRAB-1000 HE AP
				16	PTAB-2.5 bomblet HE anti-armor
				17	122mm 1 HEAT
				18	120mm 1 HEAT-FS
				19	100mm 1 APFSDS-T 2 HEAT 3 HEAT-FS
				20	RPG-7VAT Grenade Launcher
				21	130 mm 1 APC-T BR-482B

4.2.3.2.2.3 Anti-guided-weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	3	222	1	Guided	
			1	SH-01 Galosh (UR-96)	
			2	SH-08	
			3	SH-11 Gorgon	
			2	Ballistic	
			1	30 mm	
			1	UOF-84 HE-I	
			2	UOR-84 HE-T	

4.2.3.2.2.4 Antiradar

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	4	222	1	Guided	
			1	AS-4 Kitchen	
			2	AS-9 Kyle	
			3	AS-12 Kegler	
			4	AS-11 Kilter	
			5	KH-31P/X-31 or possibly AS-17	
			6	SS-21 Scarab	
			1	Tochka-R	

4.2.3.2.2.5 Antisatellite

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	5	222	1	Guided	
			1	Antisatellite System	

4.2.3.2.2.6 Antiship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	222			

1 Guided

1 AS-2 Kipper

2 AS-4 Kitchen

4 AS-6 Kingfish

5 AS-13 Kingbolt

7 AS-15 Kent

1 AS-15A w/ Tu-95 Bear-H w/HE warhead

2 S-15B w/ Tu-160 Blackjack w/HE warhead

8 SS-N-2 Styx

1 SS-N-2a

2 SS-N-2b

3 SS-N-2c

4 SS-N-2d

9 SS-N-7 Starbright

10 SS-N-9 Siren

11 SS-N-12 Sandbox

12 SS-N-19 Shipwreck

1 Boost phase vehicle

2 Jettisoned vehicle

3 Separated warhead

13 SS-N-22 Sunburn

14 SS-N-3 Shaddock

1 SS-N-3a

2 SS-N-3b

3 SS-N-3c

15 SSC-2b Samlet Cruise

16 SSC-1b Sepal

17 SSC-3 Styx

18 533-mm torpedo

19 406-mm torpedo

22 SS-N-21 Sampson

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	222		23	SS-N-25 (Kh 35)
				24	AS-5 Kelt
				25	AS-10 Karen
				26	AS-17 Krypton
				27	53 CM Torpedo Thermal (turbine)
				28	65 CM Torpedo Thermal

2 Ballistic

- 1 12.7 mm
- 2 14.5 mm
- 3 23 mm
- 4 25 mm
- 5 30 mm
 - 1 BR-83 AP-T
 - 2 OF-83D HE
- 6 57 mm
- 7 76 mm
- 8 85 mm
- 9 100 mm
- 10 130 mm
 - 1 SM-4-1

3 Fixed

- 1 M-26 mine

4.2.3.2.2.7 Antisubmarine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	7	222			

1 Guided

2 SS-N-14 Silex

3 SS-N-15 Starfish

4 SS-N-16 Stallion

5 533-mm torpedo

1 Type 3

2 Type 3 nuclear

3 new passive wake-homing turbine

4 new electric

6 406-mm Type 40 torpedo

7 650-mm submarine-launched torpedo

13 Type 45 (light, air-launched)

14 Type E53 (light, air-launched)

2 Ballistic

1 FRAS-1/SUW-N-1 (VETER)

2 RBU 1000

3 RBU 1200

4 RBU 2500

5 RBU 6000

6 RBU 12000

4.2.3.2.2.8 Antipersonnel

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	222			

2 Ballistic

1 5.45 mm

- 1 5.45-mm Soviet pistol (aka 5.45 x 18 mm)
- 2 5.45-mm Soviet rifle (aka 5.45 x 39.5 mm and 5.45-mm M74)

2 7.62 mm

- 1 7.62 x 25-mm Soviet pistol (aka 7.62-mm Tokarev)
- 2 7.62 x 38R Nagant Revolver (aka 7.62-mm Soviet revolver and 7.62-mm Nagant gas-seal)
- 3 7.62-mm Soviet M1943 (aka 7.62 x 39 mm, 7.62-mm Kalashnikov, and 7.62-mm obr 43g)
- 4 7.62-mm Mosin-Nagant (aka 7.62 x 54R, 7.62-mm Soviet Rimmed, and 7.62-mm obr 1891)

3 9 mm

- 1 9-mm Makarov (aka 9 x 18 mm Soviet, 9-mm Stechkin, and 9-mm Type 59)

7 82 mm

- 1 HE fragmentation (O-881A)

8 107-mm M-38 mortar

9 AO-1 SCH bomblet HE submunition

10 AO-2.5 bomblet

11 AO-2.5 HE submunition

12 AO-2.5-2 HE submunition

13 AO-8M2 HE

14 AO-10 HE

15 AO-10-6.5 HE

16 AO-20 HE

17 AO-20M3 HE

18 AO-25M1 HE

19 AO-25M2 HE

20 AO-100 HE

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	222			
				21	FAB-50 HE
				22	FAB-70 HE
				23	FAB-100 M43 HE
				24	FAB-100 M62 HE
				25	FAB-250 HE
				26	FAB-250 M43 HE
				27	FAB-250 M46 HE
				28	FAB-250 M54 HE
				29	FAB-250 M62 HE
				30	FAB-500 HE
				31	FAB-500 M46 HE
				32	FAB-500 M54 HE
				33	FAB-500 M62 HE
				34	FAB-1000 M62 HE
				35	FAB-1500 M46 HE
				36	FAB-1500 M54 HE
				37	FAB-3000 M46 HE
				38	KhAB 100-kg (80) mustard gas/lewisite HL
				39	KhAB 100-kg (100) mustard gas/lewisite HL
				40	KhAB 250-kg Sarin (GB)
				41	M-1 bomblet (35-40 g of liquid explosive)
				42	Mustard gas/lewisite HL (from 500- and 1500-kg spray tanks)
				43	OFAB-100M HE
				44	OFAB-100MH HE
				45	OFAB-100NV HE
				46	OFAB-250M HE

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	222			
					47 OKT-11 bomblet (incendiary or chemical)
					48 ROSAB bomblet HE
					49 Soman (GD) (from 250-kg spray tank)
					50 ZAB-1E incendiary (1.5 kg)
					51 ZAB 500 T Shch incendiary (500 kg)
			3	Fixed	
					1 Wooden TMD-B AT mine
					5 TM-46 AT-blast mine
					6 TMN-46 AT-blast mine
					7 TM-57 AT mine
					8 TM-62M AT mine (metal casing)
					9 TMK-2 AT shaped-charge mine
					10 Area-type POMZ-2 AP-fragmentation mine
					12 MON series AP mine (directional) (MON-50/MON-90/MON-100/MON-200)
					13 PMN AP-blast mine
					15 AMD-500
					16 AMD-1000
					17 AMG-1
					18 BDT mine-clearance charge
					19 ITB-2 mine-clearance charge
					20 KMD-500
					21 KMD-1000
					22 M-08
					23 M-12
					24 M-16

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	222			
				25	M-AG
				26	M-KB
				27	M-KB-3
				28	Mirab
				29	MYaM
				30	MYaRM
				31	MZ-26
				32	OZM bounding AP mine
				33	OZM-3 bounding AP mine
				34	OZM-4 bounding AP mine
				35	OZM-72 bounding AP mine
				36	OZM-160 bounding AP mine
				37	PFM-1 or PMZ AP mine/bomblet
				38	PGMDM scatterable Anti-tank mine
				39	PLT
				40	PLT-3
				41	PMD-6 wooden AP mine
				42	PMD-6M wooden AP mine
				43	PMD-7 wooden AP mine
				44	PMD-7ts wooden AP mine
				45	PMD-57 wooden AP mine
				46	PMN AP mine
				47	PMN-2 AP mine
				48	PMN-6
				49	POMZ-2 AP stake mine
				50	POMZ-2M AP stake mine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	222			
				51	SPZ-2 mine-clearance charge
				52	SPZ-4 mine-clearance charge
				53	TM-62 AT mine P2 (plastic casing)
				54	TM-62B waterproof cardboard casing
				55	TM-62D rectangular wooden case
				56	TM-62 P3 plastic casing
				57	TMD-B Anti-tank mine
				58	TMD-44 Anti-tank mine
				59	UEP
				60	UZ-1 Bangalore torpedo
				61	UZ-2 Bangalore torpedo

4.2.3.2.2.9 Battlefield support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	222			

1 Guided

- 1 AS-3 Kangaroo
- 2 AS-4 Kitchen
- 4 AS-7 Kerry
- 5 AS-10 Karen
 - 1 AS-10 (radio)
 - 2 AS-10 (laser)
- 7 AS-14 Kedge
- 9 AS-16 Kickback
- 15 KAB-500N laser-guided HE
- 16 KAB-500T TV-guided HE
- 17 SS-21 Scarab
 - 1 SS-21 W/HE Warhead (9M79F)
 - 2 SS-21 W/sub-munition warhead (9M79K)
 - 3 SS-21 W/nuclear warhead (9M79B)

2 Ballistic

- 1 12.7 mm Soviet machine gun (aka 12.7 x 107mm)
 - 1 API type Bz
 - 2 API - T type BZT
- 2 14.5 mm Soviet machine gun (aka 14.5 x 114mm)
 - 1 API type BS41
 - 2 API-T type BZT
 - 3 Incendiary type ZP
- 3 23 mm
- 4 25 mm
 - 1 25 mm Soviet 2-M3
 - 2 25 mm Soviet 2-M8
- 5 30 mm grenade
 - 1 HE FRAG
- 6 37 mm
- 7 40-mm rocket

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	222		8	45 mm
				10	82 mm (mortar)
				1	82-mm model 0-832 DU HE fragmentation bomb
				11	100 mm
				1	HE-FRAG OF-412
				12	107 mm
				13	120 mm (mortar)
				1	HE bomb F-843
				2	HE bomb OF-843
				3	HE bomb OF-843A
				4	WP
				5	HE FRAG
				6	Illumination
				7	Incendiary
				14	122 mm
				15	122-mm rocket
				1	M-21-OF (9M22M)
				2	M-21-OF (9M22U)
				3	Smoke
				4	HE FRAG
				5	ICM
				16	125 mm
				1	HE-FRAG OF-19
				17	130 mm
				1	FRAG-HE OF-482M
				18	139.7-mm rocket
				1	M-14-OF
				19	152 mm
				1	HE
				20	160 mm (mortar)
				1	HE BOMB F-853U
				2	HE BOMB F-853A
				3	HE Bomb F-852
				21	180 mm
				22	203-mm Howitzer
				23	220-mm rocket

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	222		24	240 mm (mortar) 1 F-864 HE bomb
				25	240-mm rocket
				26	250-mm rocket
				27	400-mm rocket
				28	550-mm rocket
				29	600-mm rocket
				30	850-mm missile
				31	1100-mm missile
				32	250 SHN HE (parachute-retarded)
				33	500 SH HE (parachute-retarded)
				34	BETAB-150DS HE concrete-piercing
				35	OF-841A HE fragmentation bomb
				36	81mm smoke grenade
				37	Frog-7
				38	57 mm rocket 1 S5
				39	73mm 1 HE FRAG
				40	80mm rocket 1 S8
				41	8/mm grenade 1 RP
				42	115mm 1 HE FRAG
				43	120mm (gun/mortar) 1 Incendiary 2 HE FRAG 3 Illumination 4 WP

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	222			
				44	MCLC
				45	300-mm rocket
				1	9M5K1 rocket

4.2.3.2.2.10 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	10	222			

1 Guided

1 SS-N-5 Sark

2 SS-N-6 Serb

1 SS-N-6

2 SS-N-6 Mod 1

3 SS-N-6 Mod 2

3 SS-N-8 Sawfly

4 SS-N-17 Snipe

5 SS-N-18 Stingray

6 SS-N-20 Sturgeon

7 SS-N-23 Skiff

8 SS-N-21 Sampson

11 AS-15 Kent

1 AS-15A (Tu-95 Bear-H) w/nuclear warhead

2 AS-15B (Tu-160 Blackjack) w/nuclear warhead

14 SS-11 Segoe

15 SS-13 Savage

16 SS-16 Sinner

17 SS-17 Spanker

18 SS-18 Satan

19 SS-19 Stiletto

20 SS-20 Saber

21 SS-24 Scapel

22 SS-25 Sickle

1 RS-12m (Topol)

2 RS-12 M1 (Topol-M)

3 RS-12 M2 (Topol-M, silo based)

4.2.3.2.2.11 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	11	222	2	Ballistic	
			2	SCUD-B	
			3	(deleted)	

4.2.3.2.3 United Kingdom munitions

All U.K. munitions have a Kind-field value of 2 and a Country-field value of 224.

4.2.3.2.3.1 Anti-air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	224	1	Guided	
			2	Rapier Mk 1	
			3	Rapier Mk 2	
				1	Rapier Mk 2A (impact fuze)
				2	Rapier Mk 2B (proximity fuze)
			4	Seacat/Tigercat	
			5	Blowpipe	
			6	Javelin	
			7	Star Streak	
			8	Sea Dart	
				1	GWS 30
			9	Sea Wolf	
				1	GWS 25
				2	GWS 26 Mod 1
			10	Sky Flash	

4.2.3.2.3.2 Anti-armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	224			

1 Guided

- 1 Milan missile
- 2 Swingfire missile
- 3 Merlin
- 4 FI TOW
- 5 Trigat
- 6 LAW 80
- 7 SWAARM
- 8 Wolverine

2 Ballistic

- 1 30mm RARDEN APDS
- 2 120mm APFSDS-T (L23A1)
- 3 120mm HESH- T(L31)
- 4 27mm Mauser HE

4.2.3.2.3.3 Anti-guided-weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	3	224			

1 Guided

- 1 Decoys
 - 1 Towed radar decoy

4.2.3.2.3.4 Antiradar

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	4	224			

1 Guided

- 1 ALARM

4.2.3.2.3.5 Antiship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	224			

1 Guided

- 1 Vosper Thornycroft Excalibur Coast Defense Missile System
- 2 Sea Eagle
- 3 Sea Eagle SL
- 4 Sea Skua
- 5 Martel

4.2.3.2.3.6 Antisubmarine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	7	224			

1 Guided

- 1 Tigerfish torpedo
- 2 Spear Fish torpedo
- 3 Sting Ray torpedo
- 4 Mk 24 torpedo

4.2.3.2.3.7 Antipersonnel

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	224			

2 Ballistic

- 1 7.62 mm
- 2 9.0 mm

4.2.3.2.3.8 Battlefield support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	224	1		Guided
			2		Ballistic
			1		51 mm
			2		89 mm
			3		105 mm
			4		155 mm
			5		175 mm
			6		30 mm RARDEN HE
			7		120 mm smoke WP (L34)

4.2.3.2.3.9 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	10	224	1		Guided
			1		A-3TK Polaris

4.2.3.2.4 French munitions

All French munitions have a Kind-field value of 2 and a Country-field value of 71.

4.2.3.2.4.1 Anti-air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	71	1	Guided	
				1	Aster 15
				2	Aster 30
				3	Crotale
					1 Crotale R440 missile
					2 VT-1 (Crotale NG) missile
				4	Roland
				5	Mistral
				6	Masurca
				7	Mica Missile
					1 Radar
					2 IR
				8	R530
				9	R-550 Magic
					1 R-550 Magic 1
					2 R-550 Magic 2
				10	Super 530
					1 Super 530F
					2 Super 530D
			2	Ballistic	
				1	20 mm
				2	25 mm
				3	30 mm
				9	90
				30	.50 Cal.

4.2.3.2.4.2 Anti-armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	71	1	Guided	
					1 SS-11/AS-11
					2 Eryx missile
					3 HOT missile
					4 Milan missile
					5 ACL-STRIM
					6 Entac
					7 AS-15
					1 AS-15 TT
					8 BAT 120 anti-armor bomb
			2	Ballistic	
					2 8 in.
					3 20 mm
					4 25 mm
					5 30 mm
					6 60 mm
					7 68 mm
					8 74 mm
					9 90 mm
					10 105 mm
					11 106 mm
					12 120 mm
					13 155 mm
					14 175 mm

4.2.3.2.4.3 Anti-guided-weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	3	71			
			1	Guided	
				1	Decoys

4.2.3.2.4.4 Antiradar

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	4	71			
			1	Guided	
				1	Armat
				2	AS 37 Martel

4.2.3.2.4.5 Antiship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	71			

1 Guided

1 Exocet

- 1 MM-38
- 2 AM-39
- 3 SM-39 Exocet
- 4 MM-40

2 AS-11

3 SS-12M

4 AS-15

5 AS-30

6 AS-37 Martel

8 Otomat

- 1 Mk1
- 2 Mk2

9 E-14 torpedo

10 E-15 torpedo

11 F-17 torpedo

12 L-5 torpedo

13 Z-16 torpedo

14 AS-12

2 Ballistic

1 20 mm

2 25 mm

3 30 mm

4.2.3.2.4.6 Antisubmarine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	7	71			

1 Guided

1 Malafon

2 E-14 torpedo

3 E-15 torpedo

4 F-17 torpedo

5 L3 torpedo

6 L4 torpedo

7 L5 torpedo

8 Murene torpedo

4.2.3.2.4.7 Antipersonnel

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	71			

2 Ballistic

1 .22 cal. Long Rifle

2 .30-06

3 .380 cal.

4 .38

5 .45 cal.

6 .50 cal.

7 5.56 mm

8 6.35 mm

9 7.5 mm

10 7.62 mm

11 7.65 mm

12 8 mm

13 9 mm

14 20 mm

15 25 mm

16 30 mm

17 60 mm

18 68 mm

19 81 mm

20 90 mm

21 120 mm

4.2.3.2.4.8 Battlefield Support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	71			

1 Guided

- 1 Hades missile
- 2 Pluton missile
- 3 AS 30L (laser guided)
- 4 ASMP
- 5 Excalibur MP 22 bomb
- 6 Matra laser-guided bomb (LGB)

2 Ballistic

- 1 .50 Cal.
- 2 20 mm
- 3 25 mm
- 4 30 mm
- 5 58 mm
- 6 74 mm
- 7 90 mm
- 8 105 mm
- 9 106 mm
- 10 155 mm
- 11 175 mm
- 12 8 in.
- 50 BAP 100-mm airfield attack bomb
- 51 BLG 66 Belouga bomb
- 52 BM 400 bomb
- 53 CASCAD Mk 1
- 54 CASCAD Mk 2

- 55 CH-TABO Pod
- 56 Durandal penetration bomb
- 57 LU 250 EG-FT bomb
- 58 SAMP BL 61 125-kg fragmentation bomb
- 59 SAMP BL 70 400-kg fragmentation bomb
- 60 SAMP BL 99 450-kg bomb
- 61 SAMP BL EU4 1000-kg bomb
- 62 T 15 SAMP fragmentation bomb
- 63 BL 8 SAMP fragmentation bomb
- 64 BL 9 SAMP fragmentation bomb
- 65 BL 18 SAMP fragmentation bomb
- 66 SAMP GP bomb family
- 67 SAMP 81 AF 125-kg bomb
- 68 TBA retarded 125-kg close-support bomb

4.2.3.2.4.9 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	10	71			

1 Guided

- 1 SSBS Type S-30D/TN-61
- 2 SSBS Type S-4(SX)
- 3 SLBM M-20
- 4 SLBM M-4

4.2.3.2.5 German munitions

All German munitions have a Kind-field value of 2 and a Country-field value of 78.

4.2.3.2.5.1 Anti-air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	78	1	Guided	
			1	Roland	
			1	Roland 1	
			2	Roland 2	
			3	Roland 3	
			2	Ballistic	
			1	20 mm	
			2	35 mm	

4.2.3.2.5.2 Anti-armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	78	1	Guided	
			1	Milan missile	
			2	HOT missile	
			3	TOW missile	
			4	Pars 3 missile	
			2	Ballistic	
			1	110-mm rocket	
			2	105-mm APDS-T	
			3	105-mm APFSDS-T	
			4	105-mm HEAT-T	
			5	120-mm HEAT-MP-T DM12	
			6	120-mm APFSDS-T DM13	
			7	120-mm APFSDS-T DM23	
			8	120-mm APFSDS-T DM33	
			3	Fixed	
			1	Anti-tank mine	
			1	MIFF	
			2	KB44	

4.2.3.2.5.3 Antiship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	78			

1 Guided

- 1 Kormoran
- 2 AEG Seeal 533 mm Torpedo
- 3 SST-3 Torpedo
- 4 SST-4 Torpedo
- 5 DM2A1 Seal Torpedo
- 6 DM2A3 Seehecht Torpedo
- 7 SUT Torpedo
- 8 G7e Torpedo

4.2.3.2.5.4 Antisubmarine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	7	78			

1 Guided

- 1 AEG Seeschlange 533 mm Torpedo

4.2.3.2.5.5 Antipersonnel

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	8	78			

2 Ballistic

- 1 5.56 mm
- 2 7.62 mm
- 3 9 mm

3 Fixed

- 1 Mine

4.2.3.2.5.6 Battlefield support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	78			

1 Guided

1 Parachute signal rocket, white

2 Ballistic

1 20 mm

2 35 mm

3 73 mm

4 105 mm

5 120 mm

1 HE

2 APFSDS-P

3 TRCSDS-T

4 SABOT

5 Heat (MZ)

4.2.3.2.6 Iraq munitions

All Iraq munitions have a Kind-field value of 2 and a Country-field value of 102.

4.2.3.2.6.1 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	11	102			

2 Ballistic

1 Al Abbas

2 Al Hussein

3 (deleted)

4 (deleted)

4.2.3.2.7 Israel munitions

All Israel munitions have a Kind-field value of 2 and a Country-field value of 105.

4.2.3.2.7.2 Anti-Air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	105	1	Guided	
					1 Shafrir 2
					2 Python III
					3 Python IV

4.2.3.2.7.3 Anti-Armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	105	1	Guided	
					1 TOW (Ramata) M-113
					2 Picket 81 mm

4.2.3.2.7.4 Anti-Guided Weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	3	105	1	Guided	
					1 Surface to Air
					1 Barak

4.2.3.2.7.5 Anti-Ship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	105	1	Guided	
			1	Gabriel	
			1	Gabriel I	
			2	Gabriel II	
			3	Gabriel III (Mod)	
			2	LUZ	
			3	(deleted)	
			4	(deleted)	

4.2.3.2.7.6 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	11	105	2	Ballistic	
			1	Jericho 2	

4.2.3.2.8 People's Republic of China munitions

All People's Republic of China munitions have a Kind-field value of 2 and a Country-field value of 45.

4.2.3.2.8.2 Anti-Air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	45			

1 Guided

- 1 HQ-2 (CSA-1)
 - 1 HQ-2
 - 2 HQ-2J
 - 3 HQ-2B

- 3 HQ-61 SAM

- 4 HN-5 (SA-7 type)
 - 1 HN-5
 - 2 HN-5A

- 8 PL-2 ATOLL type
 - 1 PL-2
 - 2 PL-2A

- 10 PL-5B ATOLL Type

- 11 PL-7

- 12 PL-9

- 13 PL-8 (python-III type)

- 14 PL-4 (Aspide type)

- 15 LY-60

- 16 FM-80 / HQ-7 (Crotale type)

- 17 QW-1 Vanguard

2 Ballistic

- 1 12.7 mm Type 54
 - 1 API
 - 2 API-T

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	45			
				2	14.5 mm Type 56
					1 API
					2 API-T
				3	Incendiary
				4	57 mm
				5	85 mm
				6	100 mm
				7	37 mm Type 55
					1 HE
					2 HE-T
					3 APHE
					4 AP-T

4.2.3.2.8.3. Anti-Armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	45	1	Guided	
			1	HJ-7S (Sagger type)	
			2	HJ-8 (TOW/Milan type)	
			2	Ballistic	
			1	57 mm type 55	
			2	76 mm type 54	
			3	100 mm	
			1	HE Type 73	
			2	HEAT Type 73	
			3	APDS Type 73	
			4	APFSDS Type 73	
			5	APFSDS Type 86	
			6	APFSDS-T Type AP100-2	
			7	APFSDS-T (for Type 59 MBT)	
			8	HE (for Type 69 MBT)	
			9	HEAT (for Type 69 MBT)	
			10	APHE (for Type 69 MBT)	
			11	APFSDS (for Type 69 MBT)	
			12	HVAPDS (for Type 69 MBT)	
			5	105 mm	
			1	HE	
			2	HESH	
			3	HEAT	
			4	HEAT-T	
			5	APDS	
			6	APFSDS	
			7	APFSDS-T	
			8	Type 75	
			6	82 mm Type 65 (recoilless rifle)	
			7	85 mm Type 56 ATG	
			1	HE	
			2	HEAT-FS	
			3	HESH	
			8	90 mm Type 51	

4.2.3.2.8.4 Anti-Guided Weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	3	45			
			1		Guided
			2		Ballistic

4.2.3.2.8.5 Antiradar

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	4	45			
			1		Guided
			2		Ballistic

4.2.3.2.8.7 Antiship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	45			

1 Guided

2 YJ-1/C-801/CSS-N-4 Sardine (Exocet type)

4 CSS-N-2 (HY-2 Styx derivative Silkworm)

7 SY-1/FL-1

1 CSSC-1B mod 1/2 Coastal Defense missile

2 CSS-N-1 Scrubbrush mod 1/2

8 HY-1

1 HY-1/CSSC-2A Silkworm

2 HY-1A/CSSC-2B Silkworm

3 CSS-N-2 Safflower

9 HY-2/CSSC-3

1 HY-2A/CSSC-3A

2 HY-2G/CSSC-3B

3 HY-2B/CSSC-3C

4 C-601/CAS-1 Kraken

10 HY-4

1 HY-4/CSSC-7 Sadsack

2 C-611 (air launched variant)

11 YJ-2/C-802/CSS-N-8 Saccade

2 Ballistic

1 100 mm Gun

2 130 mm Gun

4.2.3.2.8.8 Antisubmarine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	7	45			

1 Guided

1 CY-1 ASW Msl Torpedo

4.2.3.2.8.10 Battlefield Support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	45			
			1	Guided	
			2	Ballistic	
			7	7.62 mm	
			8	12.7 mm	
			9	73 mm	
			10	100 mm	
					1 Mortar bomb (Type 71)
			11	107 mm Rocket	
					1 HE-Frag
					2 Type 63 HEI
					3 Type 63-I HEI
					4 Type 63-II HE
					5 Type 63-III HE
					6 Jamming rocket
			12	120 mm	
					1 Mortar bomb (Type 55)
			13	122 mm	
					1 HE Type 54
					2 Smoke Type 54
					3 Illuminating Type 54
			14	122 mm Rocket	
					1 HE
					2 HE-Frag
					3 HEI
					4 HE Cargo
					5 HEI-Frag
					6 Minelaying
					7 Minelaying Type 84
			15	130 mm	
					1 HE Type 59
					2 Illumination Type 59
					3 MP-130 RAP
					4 ERFB-HE
			16	130 mm rocket	
					1 HE Type 63
					2 HE-Frag Type 82
					3 HEI Type 82
					4 Extended-range HE-Frag

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	45			

17 152 mm

- 1 HE Type 66
- 2 Smoke Type 66
- 3 Type MP-152 RAP
- 4 NORINCO Incendiary
- 5 NORINCO Smoke
- 6 NORINCO Illuminating
- 7 HE Type 83
- 8 NORINCO ERFB-BB

18 155 mm

- 1 ERFB
- 2 ERFB-BB
- 3 ERFB-WP
- 4 ERFB Illuminating

19 160 mm

- 1 Mortar bomb type 56

20 253 mm

- 1 Minesweeping rocket Type 81
- 2 Minesweeping rocket Type 81-II

21 284 mm

- 1 Minelaying rocket Type 74
- 2 Minelaying rocket Type 85

22 M-7/CSS-8 (HQ-2 SSM variant)

4.2.3.2.8.11 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	10	45	1	Guided	
			2	CSS-2 (DF-3)	
			3	CSS-3 (DF-4)	
			4	CSS-4 (DF-5)	
				1	DF-5
				2	DF-5A
			5	DF-21	
			6	DF-31	
			7	DF-41	
			8	JL-1 (CSS-N-1)	

4.2.3.2.8.12 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	11	45	2	Ballistic	
			1	DF-15 (M-9)	
			2	M-11 / DF-11 / CSS-7	

4.2.3.2.9 North Korea munitions

All North Korea munitions have a Kind-field value of 2 and a Country-field value of 119.

4.2.3.2.9.1 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	11	119	2	Ballistic	
			1	(deleted)	
			2	Scud-C (SS-1D)	
			3	No Dong	
				1	Booster phase vehicle
				2	Jettisoned booster
				3	Separated warhead

4.2.3.2.9.2 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	10	119	1	Guided	
				1	Taepo Dong I

4.2.3.2.10 Sweden Munitions

All Sweden munitions have a Kind-field value of 2 and a Country-field value of 205.

4.2.3.2.10.1 Anti-air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	205			

1 Guided

1 RBS-70

- 1 RBS-70 Mk 1
- 2 RBS-70 Mk 2

2 Ballistic

1 40 mm

- 1 PFHE mk 2
- 2 3P

2 57 mm

4.2.3.2.10.2 Anti-armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	2	205			

2 Ballistic

1 40 mm

- 1 APFSDS-T

4.2.3.2.10.3 Battlefield Support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	9	205			

2 Ballistic

1 40 mm

- 1 HE
- 2 MP-T

4.2.3.2.11 Italy Munitions

All Italy munitions have a Kind-field value of 2 and a country-field value of 106.

4.2.3.2.11.1 Anti-Air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	1	106	1	Guided	
			2	ASPIDE	

4.2.3.2.11.2 Anti-Guided Weapon

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	3	106	1	Guided	
			1	Decoy	
				1	BREDA SCLAR 105 mm

4.2.3.2.11.3 Anti-Ship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	6	106			
			1	Guided	
			1	OTO Melara Teseo MK 2	
			2	MILAS	
			3	324 mm B-515 Torpedo	
			4	MARTE 2	
			5	Sistel Sea Killer	
			2	Ballistic	
			1	40 mm/70 BREDA	
			2	3 in/62 MMK OTO Melara	
			3	5 in/54 OTO Melara	
			4	25 mm twin	
			5	30 mm twin	
			6	Whitehead K113	

4.2.3.2.11.4 Anti-Submarine

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
2	7	106			
			1	Guided	
			1	324 mm B-515	
			2	Whitehead A290	
			3	Whitehead A184	
			4	Whitehead A-244/s Torpedo	

4.2.3.2.12 Japan munitions

All Japan munitions have a Kind-field value of 2 and a Country-field value of 110

4.2.3.2.12.1 Anti-Ship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	6	110			

1 Guided

1 Type 89 Torpedo

4.2.3.2.13 Yugoslavia munitions

All Yugoslavia munitions have a Kind-field value of 2 and a Country-field value of 240

4.2.3.2.13.1 Anti-Armor

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	2	240	3	Fixed	1 TMRP-6 Anti-tank mine

4.2.3.2.14 Terrorist munitions

All terrorist munitions have a Kind-field value of 2 and a Country-field value of 0

4.2.3.2.14.1 Anti-personnel

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	8	0			

3 Fixed

1 AN/FO (94% ammonium nitrate, 6% fuel oil)

- 1 1,000 lbs. Explosive
- 2 2,000 lbs. Explosive
- 3 5,000 lbs. Explosive
- 4 10,000 lbs. Explosive
- 5 15,000 lbs. Explosive
- 6 20,000 lbs. Explosive
- 7 25,000 lbs. Explosive
- 8 30,000 lbs. Explosive
- 9 35,000 lbs. Explosive
- 10 40,000 lbs. Explosive
- 11 45,000 lbs. Explosive
- 12 50,000 lbs. Explosive

4.2.3.2.15 Iran munitions

All Iran munitions have a Kind-field value of 2 and a Country-field value of 101.

4.2.3.2.15.1 Anti-ship

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	6	101			

3 Fixed

1 SADAFF-02 mine

4.2.3.2.15.2 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	10	101			

1 Guided

1 Shahab 4

4.2.3.2.15.3 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	11	101			

2 Ballistic

1 Shahab 3

1 Boost phase vehicle

2 Jettisoned booster

3 Separated warhead

4.2.3.2.16 Switzerland munitions

All Switzerland munitions have a Kind-field value of 2 and a Country-field value of 206.

4.2.3.2.16.1 Anti-air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	1	206			

2 Ballistic

1 35 mm

- 1 HEI-T
- 2 SAPHEI-T
- 3 FAPDS
- 4 AHEAD

4.2.3.2.17 India munitions

All India munitions have a Kind-field value of 2 and a Country-field value of 99.

4.2.3.2.17.1 Strategic

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	10	99			

1 Guided

1 Agni

4.2.3.2.17.2 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	11	99			

2 Ballistic

1 Prithvi

4.2.3.2.18 Pakistan munitions

All Pakistan munitions have a Kind-field value of 2 and a Country-field value of 165.

4.2.3.2.18.1 Battlefield Support

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	9	165			

2 Ballistic

1 Hatf-1

2 Hatf-2

4.2.3.2.18.2 Tactical

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat.</u>	<u>Scat</u>	<u>Specific</u>
2	11	165			

2 Ballistic

1 Hatf-3

2 Ghauri

4.2.3.3 Life Forms

Kind Domain Country Cat Scat Specific

3 Life Form
 0 Other

 1 Land

As required, see 4.2.2.

 0 Other

 1 Dismounted Infantry (with)

 0 Other

 1-255 See 4.2.3.3.1- 4.2.3.3.5.

 1-100 Number of individuals

 101 Fire Team

 102 Squad

 103 Platoon

 104 Company

 105 Battalion

 106 Regiment

 107 Division

 108 Corps

 109 Army

 2 Dismounted Infantry (non-visible)

 0 Other-Observation Post

2 Air

As required, see 4.2.2.

 0 Other

 1 Parachutist (with)

 1-255 See 4.2.3.3.1- 4.2.3.3.5.

 1-100 Number of individuals

 101 Fire Team

 102 Squad

 103 Platoon

 104 Company

 105 Battalion

 106 Regiment

 107 Division

 108 Corps

 109 Army

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
3			2		A bird
			3		Flock of birds
			0		Unspecified size
				1-100	Number of individuals
3					Surface
					As required, see 4.2.2.
			0		Other
			1		Swimmer (with)
			0		Other
			1-255		See 4.2.3.3.1- 4.2.3.3.5.
				1-100	Number of individuals
				101	Fire Team
				102	Squad
				103	Platoon
				104	Company
				105	Battalion
				106	Regiment
				107	Division
				108	Corps
				109	Army
			2		Occupied life raft
			0		Unused
				1-100	Number of individuals
				101	Fire Team
				102	Squad
				103	Platoon
				104	Company
				105	Battalion
				106	Regiment
				107	Division
				108	Corps
				109	Army
4					Subsurface
					As required, see 4.2.2.
			0		Other
			1		Diver (with)

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
3					
				0	Other
				1-255	See 4.2.3.3.1- 4.2.3.3.5.
				1-100	Number of individuals
			2		School of Fish
				0	Unspecified size
				1-100	Number of individuals
			3		School of Shrimp
				0	Unspecified size
				1-100	Number of individuals
			4		Whale
5					Space
					As required, See 4.2.2.
				0	Other
				1	Astronaut (with)
				0	Other
				1-255	See 4.2.3.3.1- 4.2.3.3.5.
				1-100	Number of individuals

4.2.3.3.1 U.S. weapons for Life Forms

This section defines the weapons that may be carried by the life forms enumerated in 4.2.3.3.

Pistols

- 1 Assault machine pistol, KF-AMP
- 2 Automatic model 1911A1 .45
- 3 Combat Master Mark VI .45, Detronics
- 4 De-cocker KP90DC .45
- 5 De-cocker KP91DC .40
- 6 General officer's Model 15 .45
- 7 Nova 9-mm, LaFrance
- 8 Personal Defense Weapon MP5K-PDW 9-mm
- 9 Silenced Colt .45, LaFrance
- 10 5900-series 9-mm, Smith & Wesson (S&W)
- 11 M9
- 12 Model 1911A1, Springfield Armory
- 13 Model 2000 9-mm
- 14 P-9 9-mm, Springfield Armory
- 15 P-12 9-mm
- 16 P-85 Mark II 9-mm, Ruger

Rifles

- 17 Advanced Combat Rifle 5.56-mm, AAI
- 18 Commando assault rifle, Model 733 5.56-mm, Colt
- 19 Infantry rifle, Mini-14/20 GB 5.56-mm, Ruger
- 20 Mini-14 5.56-mm, Ruger
- 21 Mini Thirty 7.62-mm, Ruger
- 22 Semi-automatic model 82A2 .50, Barrett
- 23 Sniper Weapon System M24 7.62-mm
- 24 Sniping rifle M21, Springfield Armory
- 25 Sniping rifle M40A1 7.62-mm
- 26 Sniping rifle M600 7.62-mm
- 27 AR-15 (M16) 5.56-mm
- 28 M1 .30
- 29 M14 7.62-mm, NATO
- 30 M14 (M1A, M1A1-A1), Springfield Armory
- 31 M14K assault rifle, LaFrance
- 32 M16A2 assault rifle 5.56-mm, Colt
- 33 M21 7.62-mm, U.S.
- 34 M77 Mark II 5.56-mm, Ruger
- 35 M77V 7.62-mm, Ruger
- 36 S-16 7.62 x 36-mm, Grendel
- 37 SAR-8 7.62-mm
- 38 SAR-4800 7.62-mm

Carbines

- 39 Assault carbine M16K, LaFrance
- 40 M1 .30
- 41 M4 (Model 720) 5.56-mm, Colt
- 42 M-900 9-mm, Calico

Submachine guns

- 43 AC-556F 5.56-mm, Ruger

- 44 M3 .45
- 45 M11, Cobray
- 46 M951 9-mm, Calico
- 47 MP5/10 10-mm
- 48 9-mm, Colt
- 49 Ingram

Machine guns

- 50 Externally powered (EPG) 7.62-mm, Ares
- 51 GECAL 50
- 52 General purpose M60 7.62-mm
- 53 Heavy M2HB-QCB .50, RAMO
- 54 Light assault M60E3 (Enhanced) 7.62-mm
- 55 Light M16A2 5.56-mm, Colt
- 56 Light 5.56-mm, Ares
- 57 Lightweight M2 .50, RAMO
- 58 Lightweight assault M60E3 7.62-mm
- 59 Minigun M134 7.62-mm, General Electric
- 60 MG system MK19 Mod 3, 40-mm
- 61 MG system (or kit) M2HB QCB .50, Saco Defense
- 62 M1919A4 .30-cal, Browning
- 63 .50-cal, Browning

Grenades and launchers

- 64 Colored-smoke hand grenade M18
- 65 Colored-smoke grenades, Federal Laboratories
- 66 Infrared smoke grenade M76
- 67 Smoke hand grenade AN-M8 HC
- 68 Delay fragmentation hand grenade M61
- 69 Delay fragmentation hand grenade M67
- 70 Impact fragmentation hand grenade M57
- 71 Impact fragmentation hand grenade M68
- 72 Incendiary hand grenade AN-M14 TH3
- 73 Launcher I-M203 40-mm
- 74 Launcher M79 40-mm
- 75 Multiple grenade launcher MM-1 40-mm

Flamethrowers

- 76 Multi-shot portable flame weapon M202A2 66-mm
- 77 Portable ABC-M9-7
- 78 Portable M2A1-7
- 79 Portable M9E1-7

Missiles

- 80 Dragon medium anti-armor missile, M47, FGM-77A
- 81 Javelin AAWS-M
- 82 Light Antitank Weapon M72 (LAW II)
- 83 Redeye, FIM-43, General Dynamics
- 84 Saber dual-purpose missile system
- 85 Stinger, FIM-92, General Dynamics
- 86 TOW heavy antitank weapon

Miscellaneous

- 87 Bear Trap AP device, Pancor
- 88 Chain Gun automatic weapon EX-34 7.62-mm
- 89 Close Assault Weapon System (CAWS), AAI
- 90 CAWS, Olin/Heckler and Koch
- 91 Crossfire SAM Model 88
- 92 Dragon and M16
- 93 Firing port weapon M231, 5.56-mm, Colt
- 94 Foxhole Digger Explosive Kit (EXFODA)
- 95 Infantry Support Weapon ASP-30 {RM} 30-mm
- 96 Jackhammer Mk 3-A2, Pancor
- 97 Light anti-armor weapon M136 (AT4)
- 98 M26A2
- 99 Master Key S
- 100 Minigun 5.56-mm
- 101 Multipurpose Individual Munition (MPIM), Marquardt
- 102 Multipurpose weapon AT8
- 103 Recoilless rifle M40, M40A2, and M40A4; 106-mm
- 104 Recoilless rifle M67, 90-mm
- 105 Revolver, SP 101
- 106 Revolver, Super Redhawk .44 magnum, Ruger
- 107 RAW rocket, 140-mm, Brunswick
- 108 Rifle-launcher Anti-Armor Munition (RAAM), Olin
- 109 Rocket launcher M-20 3.5-in
- 110 Rocket launcher, Enhanced M72 "E series" HEAT, 66-mm
- 111 Selective fire weapon AC-556 5.56-mm, Ruger
- 112 Selective fire weapon AC-556F 5.56-mm, Ruger
- 113 Shotgun M870 Mk 1 (U.S. Marine Corps), Remington
- 114 SMAW Mk 193, 83-mm, McDonnell-Douglas
- 115 SMAW-D: Disposable SMAW
- 116 Squad Automatic Weapon (SAW) M249 5.56-mm
- 117 Tactical Support Weapon 50/12, .50-cal, Peregrine
- 118 Telescoped Ammunition Revolver Gun (TARG) .50-cal, Ares
- 119 Ultimate over-under combination, Ciener
- 120 M18A1 Claymore mine

4.2.3.3.2 C.I.S. weapons for Life Forms

Pistols

- 201 Automatic (APS) 9-mm, Stechkin
- 202 PSM 5.45-mm
- 203 Self-loading (PM) 9-mm, Makarov
- 204 TT-33 7.62-mm, Tokarev

Rifles

- 205 Assault rifle AK and AKM, 7.62-mm
- 206 Assault rifle AK-74 and AKS-74, 5.45-mm
- 207 Self-loading rifle (SKS), 7.62-mm, Simonov
- 208 Sniper rifle SVD 7.62-mm, Dragunov

Submachine guns

- 209 AKSU-74 5.45-mm
- 210 PPS-43 7.62-mm
- 211 PPSH-41 7.62-mm

Machine guns

- 212 General purpose PK 7.62-mm
- 213 Heavy DShK-38 and Model 38/46 12.7-mm, Degtyarev
- 214 Heavy NSV 12.7-mm
- 215 Light RPD 7.62-mm
- 216 Light RPK 7.62-mm
- 217 Light RPK-74 5.45-mm

Grenades and launchers

- 218 Hand grenade M75
- 219 Hand grenade RGD-5
- 220 AP hand grenade F1
- 221 AT hand grenade RKG-3
- 222 AT hand grenade RKG-3M
- 223 AT hand grenade RKG-3T
- 224 Fragmentation hand grenade RGN
- 225 Fragmentation hand grenade RGO
- 226 Smoke hand grenade RDG-1
- 227 Plamya launcher, 30-mm AGS-17
- 228 Rifle-mounted launcher, BG-15 40-mm

Flamethrowers

- 229 LPO-50
- 230 ROKS-3
- 231 Cart-mounted TPO-50

Missiles

- 232 Gimlet SA-16
- 233 Grail SA-7
- 234 Gremlin SA-14
- 235 Sagger AT-3 (MCLOS)
- 236 Saxhorn AT-7
- 237 Spigot A/B AT-14
- 238 SA-18
- 239 SA-19

Miscellaneous

- 240 Grad-1P manportable tripod rocket launcher, 122-mm (for Spesnaz and other specialists; aka 9P132)
- 241 Light anti-armor weapon RPG-18
- 242 Light antitank weapon RPG-22
- 243 MG & RPG
- 244 Portable rocket launcher RPG-16
- 245 Recoilless gun 73-mm SPG-9
- 246 VAT rocket launcher RPG-7
- 248 Mon-50 antipersonnel mine

4.2.3.3.3 U.K. weapons for Life Forms

- 1 LAW 80
- 2 Blowpipe
- 3 Javelin
- 4 51-mm mortar
- 5 SLR 7.62-mm rifle
- 6 Sterling 9-mm submachine gun
- 7 L7A2 general purpose MG
- 8 L6 Wombat Recoilless rifle,
- 9 Carl Gustav 89-mm recoilless rifle
- 10 SA80 Individual/light support weapon
- 11 Trigat
- 12 Milan AT missile

4.2.3.3.4 French weapons for Life Forms

- 1 ACL-STRIM
- 2 Mistral missile
- 3 Milan AT missile
- 4 LRAC F1 89-mm AT rocket launcher
- 5 FA-MAS rifle
- 6 AA-52 machine gun
- 7 58-mm rifle grenade
- 8 FR-F1 sniper rifle

4.2.3.3.5 German weapons for Life Forms

- 1 G3 rifle
- 2 G11 rifle
- 3 P1 pistol
- 4 MG3 machine gun
- 5 Milan missile
- 6 MP1 Uzi submachine gun
- 7 Panzerfaust 3 Light Anti-Tank Weapon
- 8 DM19 hand grenade
- 9 DM29 hand grenade

4.2.3.4 Environmental Kind

For environmental entities the Subcategory field indicates the entity's size, with the following enumerated values:

- 0 Other
- 20 Very Small
- 40 Small
- 60 Medium
- 80 Large
- 100 Very Large

4.2.3.4.1 Other

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
4	0				
		0			Unused

4.2.3.4.2 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
4	1				
		0			Unused
			0		Other
			1		Radar collected noise

4.2.3.4.3 Air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
4	2				
		0			Unused
			0		Other
			1		Smoke
			2		Fog
			3		Cloud
			4		Cloud With Rain Falling
			5		Cloud With Snow Falling
			6		Haze

4.2.3.4.4 Surface

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
4	3		0		Unused
			0		Other
			1		Sea State
			2		Oil Slick
			3		Ice
			4		Debris

4.2.3.4.5 Subsurface

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
4	4		0		Unused
			0		Other
			1		Sound Velocity Profile
			2		Ice Berg
			3		Current Profile
			4		Biologics
				1	Bioluminescence
			5		Transmissivity profile

4.2.3.4.6 Space

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
4	5		0		Unused
			0		Unused

4.2.3.5 Cultural Feature

4.2.3.5.2 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
5	1		0	Unused	
			0	Other	
			1	Bridge	
			0	Other	
			1	Concrete, two-lane	
			2	Concrete, four-lane	
			3	Truss, two-lane	
			4	Truss, four-lane	
			5	Suspension, two-lane	
			6	Suspension, four-lane	
			2	Building	
			0	Other	
			1	One-story	
				1	Trapezoidal Aircraft Shelter (Trihangar)
				2	Curvilinear Aircraft Shelter
				3	Bermed Storage Bunker
				4	Hardened Curvilinear Munitions Bunker
			2	Two-story	
			3	Three-story	
			4	Four-story	

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
5	1			5	Five story
				6	Six story
				7	Seven story
				8	Eight story
				9	Nine story
				10	Ten story
			3		Tracks
				0	Other
				1	Tank
			4		Crater
			5		Obstacle
				0	Other
				1	Ditch
				2	Tank ditch, 100x4 M
				3	Tank ditch, 200x4 M
				4	Tank ditch, 300x4 M
				5	Abatis, 8-tree
				6	Concertina fence, 3-roll
				7	Log crib, rectangular
				8	Ammo prestock
				9	Fuel prestock
				10	Minefield, hasty, 0-300 M
				11	Minefield, prepared, 0-500 M
				12	Minefield, scatterable oval
				13	Barbed wire

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
5	1				14 Dragon's teeth
					15 Jersey Barrier
					6 Flags/markers
					0 Other
					1 Breached lane
					2 Minefield
					7 Prepared positions
					0 Other
					1 Armored, hull defilade
					2 Fighting, hull defilade
					3 Mortar carrier, hull defilade
					4 Tank, hull defilade
					5 Infantry fighting
					6 Machine gun
					7 Covered machine gun bunker
					8 Overhead covered infantry
					8 Underground facility
					0 Other
					1 Single level
					2 Two levels
					3 Three levels
					9 SSM Site
					10 Runway
					0 Other
					1 5m x 150m

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
5	1				

11 SAM Site

12 Nuclear Power Plant

0 Other

1 Pressurized Water Reactor

1 One Reactor Unit

2 Two Reactor Units

2 Gas-Cooled Graphite Reactor

1 One Reactor Unit

2 Two Reactor Units

3 High Temperature Gas-cooled Reactor (HTGR)

0 Other

1 One Reactor Unit

2 Two Reactor Units

4 Boiling Water Reactor

0 Other

1 One Reactor Unit

2 Two Reactor Units

13 Railyard

14 Camp Lejeune MOUT Collective Training Facility (CTF)

1 Public Building

1 City Hall

2 Church

3 School

4 School Gymnasium

2 Commercial Building

1 Bank

2 Hotel

3 Strip Mall

4 Service Station

5 Warehouse

6 2-story Office Building

7 3-story Office Building

3 Residential Building

1 1-story House

2 1-story House with Fireplace

3 2-story House

4 Town House

5 2-story Apartment Building

6 3-story Apartment Building

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
5	1				
			15		POL Storage Tank
			16		Cargo Container

4.2.3.5.4 Surface

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
5	3				

0 Unused

0 Other

1 Oil derrick

2 Buoy

3 Pier

4.2.3.5.4 Subsurface

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
5	4				

0 Unused

0 Other

1 Oil derrick

2 Buoy

3 Sunken ship

4.2.3.6 Supply type

Kind Domain Country Cat Scat Specific
6

0 Unused

0 Unused

0 Other

1 Fuels

0 Other

1 Gasoline

2 Diesel Fuel

3 JP4

4 Fuel Oil

2 Oils

3 Lubricants

4 Food

5 Spare Parts

6 Personnel

0 Other

1 Dismounted Infantry

7 Equipment

0 Other

1 Mine Plow

2 Mine Rollers

4.2.3.7 Radio types

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Nomenclature Version</u>	<u>Nomenclature</u>
7	TBD	TBD	TBD	TBD	TBD

4.2.3.8 Expendables

4.2.3.8.1 U. S. Expendables

All U. S. expendables have a Kind-field value of 8 and a Country-field value of 225.

4.2.3.8.1.1 Air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
8	2	225			
			0		Other
			1		Chaff
			1		Bundle
			0		Other
				1	TACCSF notional friendly chaff
				1	Very small
				2	Small
				3	Medium
				4	Large
				5	Very Large
				6	RR-170 Chaff
				7	RR-180 Chaff
				8	RR-188 Chaff
				9	RR-129 Chaff
				10	RR-144 Chaff
				11	M-1 Chaff
			2		Corridor
				0	Other
				1	Very small
				2	Small
				3	Medium
				4	Large
				5	Very Large
			2		Flare
				0	Other
				1	TACCSF notional friendly flare
				1	M-206 Flare
				2	MJU-7 Flare
				3	MJU-10 Flare
				4	MJU-8 / Mk46 Flare
				5	Mk47 Flare
			3		Combined chaff/flare

4 Active emitter

5 Passive decoy

4.2.3.8.1.2 Surface

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
8	3	225			

0 Other

2 Flare

4 Active emitter

5 Passive decoy

4.2.3.8.2 C.I.S. Expendables

All C.I.S. expendables have a Kind-field value of 8 and a Country-field value of 222.

4.2.3.8.2.1 Air

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
8	2	222			
			0		Other
			1		Chaff
				1	Bundle
				0	Other
					1 TACCSF notional hostile chaff
				1	Very small
				2	Small
				3	Medium
				4	Large
				5	Very Large
				6	26mm chaff cartridge
				7	50mm chaff cartridge
			2		Flare
				0	Other
					1 TACCSF notional hostile flare
				1	26mm Flare
				2	50mm Flare

4.2.3.9 Sensor/Emitter

4.2.3.9.1 U.S. Sensor/Emitter

All U.S. sensors/emitters have a Kind-field value of 9 and a Country-field value of 225.

4.2.3.9.1.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	225			

0 Other

2 RF Active

2 Early Warning / Surveillance Radar

1 AN/TPS-43

2 AN/TPS-59

3 AN/TPS-63

4 AN/TPS-75

5 AN/FPS-117

5 Target Acquisition Radar

1 AN/MPQ-64 FAAD GBS

8 Firing Point/Launch Point Determination Sensor

1 AN/TPQ-36

2 AN/TPQ-37 Firefinder

3 RF Passive

8 Firing Point/Launch Point Determination Sensor

1 Expert Missile Tracker (adjunct to AN/TPS-75)

7 Chemical, point detector

1 ACADA

1 w/Telemetry Link

2 M44A1

1 w/Telemetry Link

8 Chemical, standoff

1 M21

4.2.3.9.2 C.I.S. Sensor / Emitter

All C.I.S. sensors / emitters have a Kind-field value of 9 and a Country-field value of 222.

4.2.3.9.2.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	222	0		Other
			2		RF Active
			1		Multifunction Radar
			2		Early Warning/Surveillance Radar
				1	Back Trap
				2	Bar Lock (P-35/P-37/P-50)
				3	Flat Face (P-15, CASTA-2E1)
				4	Long Track
				5	Spoon Rest (P-12)
				6	Squat Eye (P-15M)
				7	Tall King (P-14)
				8	Tin Shield
				9	Knife Rest (P-10)
			3		Height Finding Radar
				1	Odd Group
				2	Odd Pair
				3	Side Net (PRV-11)
				4	Thin Skin
			4		Fire Control Radar
				1	Fire Can
				2	Flap Wheel
				3	Whiff
			5		Target Acquisition Radar
				1	Dog Ear
				2	Snow Drift (9S18M1)
			14		Meteorological Radar
				1	End Tray
			18		Surface Search Radar
				1	Sheet Bend

4.2.3.9.3 U.K. Sensor / Emitter

All U.K. sensors / emitters have a Kind-field value of 9 and a Country-field value of 224.

4.2.3.9.3.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	224	0		Other
			2		RF Active
			6		Target Tracking Radar

4.2.3.9.4 French Sensor / Emitter

All French sensors / emitters have a Kind-field value of 9 and a Country-field value of 71.

4.2.3.9.4.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	71	0		Other
			2		RF Active
			2		Early Warning/Surveillance Radar
			1		Thompson LP-23 (TRS-2050)
			2		Tiger-S (TRS-2100)
			3		Tiger-G (TRS-2105)
			4		THD 1940 (Picador)
			5		Volex III/IV

4.2.3.9.5 German Sensor / Emitter

All German sensors / emitters have a Kind-field value of 9 and a Country-field value of 78.

4.2.3.9.5.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	78	0		Other
			2		RF Active
				1	Multifunction Radar

4.2.3.9.6 Switzerland Sensor / Emitter

All Switzerland sensors / emitters have a Kind-field value of 9 and a Country-field value of 206.

4.2.3.9.6.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	206	0		Other
			2		RF Active
			4		Fire Control Radar
				1	Skyguard
				2	Super Fledermaus

4.2.3.9.7 Czechoslovakia Sensor / Emitter

All Czechoslovakia sensors / emitters have a Kind-field value of 9 and a Country-field value of 56.

4.2.3.9.7.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	56			

0 Other

3 RF Passive (intercept and DF)

16 Identification/Classification Radar

1 Ramona (Soft Ball)

2 Tamara (Trash Drum)

4.2.3.9.8 People's Republic of China Sensor / Emitter

All People's Republic of China sensors / emitters have a Kind-field value of 9 and a Country-field value of 45.

4.2.3.9.8.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	45	0		Other
			2		RF Active
			2		Early Warning / Surveillance Radar
				1	Cross Legs
				2	HN-503
				3	JY-8
					1 JY-8A
				4	JY-9
				5	JY-14
				6	Nanjing B/C
					1 Nanjing B
					2 Nanjing C
				7	Pin Jib
			4		Fire Control Radar
				1	Team Work
			5		Target Acquisition Radar
				1	Rice Pad
			18		Surface-Search Radar
				1	Cross Slot

4.2.3.9.9 North Korea Sensor / Emitter

All North Korea sensors / emitters have a Kind-field value of 9 and a Country-field value of 119.

4.2.3.9.9.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	119	0		Other
			2		RF Active
			4		Fire Control Radar
				1	Drum Tilt B

4.2.3.9.10 Italy Sensor / Emitter

All Italy sensors / emitters have a Kind-field value of 9 and a Country-field value of 106.

4.2.3.9.10.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	106	0		Other
			2		RF Active
			2		Early Warning/Surveillance Radar
			1		Pluto
			2		RAT-31S
			3		ATCR-33 (Selenia)

4.2.3.9.11 Sweden Sensor / Emitter

All Sweden sensors / emitters have a Kind-field value of 9 and a Country-field value of 205.

4.2.3.9.11.1 Land

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
9	1	205	0		Other
			2		RF Active
			5		Target Acquisition Radar
			1		Giraffe
				1	Giraffe-40
				2	Giraffe-50 AT
				3	Giraffe-75
			2		HARD (PS-91)

4.3 Entity Appearance

This section specifies the 32-bit enumeration for the Entity Appearance field in the Entity State PDU. This field is kind and domain specific, and as applicable, specific bits are designated to common bit locations.

The following sections describe the specific bit definitions for all entity kinds. The Entity-Kind field is found in the Entity-Type Record, as defined in IEEE 1278.1-1995. Entity-kind values are defined in section 4.2.1 of this document.

4.3.1 Platform Kind

4.3.1.1 Platforms of the Land Domain

The bits of the Entity Appearance field for land platforms are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Paint Scheme	0	Describes the paint scheme of an entity 0 - Uniform color 1 - Camouflage
Mobility	1	Describes characteristics of mobility kill 0 - No mobility kill 1 - Mobility kill
Fire Power	2	Describes characteristics of fire-power kill 0 - No fire-power kill 1 - Fire-power kill
Damage	3-4	Describes the damaged appearance of an entity 0 - No damage 1 - Slight damage 2 - Moderate damage 3 - Destroyed
Smoke entity	5-6	Describes status or location of smoke emanating from an 0 - Not smoking 1 - Smoke plume rising from the entity 2 - Entity is emitting engine smoke 3 - Entity is emitting engine smoke, and smoke plume is rising from the entity
Trailing Effects entity	7-8	Describes the size of the dust cloud trailing effect for the 0 - None 1 - Small 2 - Medium 3 - Large

Hatch	9-11	Describes the state of the primary hatch 0 - Not applicable 1 - Primary hatch is closed 2 - Primary hatch is popped 3 - Primary hatch is popped and a person is visible under hatch 4 - Primary hatch is open 5 - Primary hatch is open and person is visible 6-7 Unused
Head Lights	12	Describes whether Head Lights are on or off. 0 - Off 1 - On
Tail Lights	13	Describes whether Tail Lights are on or off. 0 - Off 1 - On
Brake Lights	14	Describes whether Brake Lights are on or off. 0 - Off 1 - On
Flaming	15	Describes whether flames are rising from an entity 0 - None 1 - Flames present
Launcher	16	Describes the elevated status of the platform's primary launcher 0 - Not raised 1 - Raised
Camouflage Type	17-18	Describes the type of camouflage 0 - Desert camouflage 1 - Winter camouflage 2 - Forest camouflage 3 - Unused
Concealed	19	Describes the type of concealment 0 - Not concealed 1 - Entity in a prepared concealed position (with netting, etc.)
	20	Unused
Frozen Status	21	Describes the frozen status of a Land Entity 0 - Not frozen 1 - Frozen (Frozen entities should not be dead-reckoned, i.e. should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data received from the frozen entity)
Power-plant Status	22	Describes the power-plant status of platform 0 - Power plant off 1 - Power plant on

State	23	Describes the state of a Land Entity 0 - Active 1 - Deactivated
Tent	24	Describes the status of a tent extension 0 - Not extended 1 - Extended
Ramp	25	Describes the status of a ramp 0 - Up 1 - Down
Blackout Lights	26	Describes whether Blackout Lights are on or off. 0 - Off 1 - On
Blackout Brake Lights	27	Describes whether Blackout Brake Lights are on or off. 0 - Off 1 - On
Spot Lights	28	Describes whether Spot Lights are on or off. 0 - Off 1 - On
Interior Lights	29	Describes whether Interior Lights are on or off. 0 - Off 1 - On
	30-31	Unused

4.3.1.2 Platforms of the Air Domain

The bits of the Entity-Appearance field for air platforms are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Paint Scheme	0	Describes the paint scheme of an entity 0 - Uniform color 1 - Camouflage
Propulsion	1	Describes characteristics of Propulsion kill 0 - No Propulsion kill 1 - Propulsion kill
	2	Unused
Damage	3-4	Describes the damaged appearance of an entity 0 - No damage 1 - Slight damage 2 - Moderate damage 3 - Destroyed
Smoke	5-6	Describes status or location of smoke emanating from an 0 - Not smoking 1 - Smoke is trailing the entity 2 - Entity is emitting engine smoke 3 - Entity is emitting engine smoke, and smoke is trailing the entity
Trailing Effects	7-8	Describes the size of the contrails or ionization trailing effects from an entity 0 - None 1 - Small 2 - Medium 3 - Large
Canopy	9-11	Describes the state of the canopy 0 - Not applicable 1 - Canopy is closed 2-3 - Unused 4 - Canopy is open 5-7 - Unused
Landing Lights	12	Describes whether Landing Lights are on or off. 0 - Off 1 - On
Navigation Lights	13	Describes whether Navigation Lights are on or off. 0 - Off 1 - On

Anti-Collision Lights	14	Describes whether Anti-Collision Lights are on or off. 0 - Off 1 - On
Flaming	15	Describes whether flames are trailing from an entity 0 - None 1 - Flames present
Afterburner	16	Describes the status of an air platform's afterburner 0 - Afterburner not on 1 - Afterburner on
	17-20	Unused
Frozen Status	21	Describes the frozen status of a air platform 0 - Not frozen 1 - Frozen (Frozen entities should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
Power-plant Status	22	Describes the power-plant status of platform 0 - Power plant off 1 - Power plant on
State	23	Describes the state of a air platform 0 - Active 1 - Deactivated
Formation Lights	24	Describes whether Formation Lights are on or off. 0 - Off 1 - On
	25-27	Unused
Spot Lights	28	Describes whether Spot Lights are on or off. 0 - Off 1 - On
Interior Lights	29	Describes whether Interior Lights are on or off. 0 - Off 1 - On
	30-31	Unused

4.3.1.3 Platforms of the Surface Domain

The bits of the Entity -Appearance field for surface platforms are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Paint Scheme	0	Describes the paint scheme of an entity 0 - Uniform color 1 - Camouflage
Mobility	1	Describes characteristics of mobility kill 0 - No mobility kill 1 - Mobility kill
	2	Unused
Damage	3-4	Describes the damaged appearance of an entity 0 - No damage 1 - Slight damage 2 - Moderate damage 3 - Destroyed
Smoke	5-6	Describes status or location of smoke emanating from an entity 0 - Not smoking 1 - Smoke plume rising from the entity 2 - Entity is emitting engine smoke 3 - Entity is emitting engine smoke, and smoke plume is from the entity
Trailing effects	7-8	Describes the size of the wake trailing effect for the entity. 0 - None 1 - Small 2 - Medium 3 - Large
	9-11	Unused
Running Lights	12	Describes whether Running Lights are on or off. 0 - Off 1 - On
	13-14	Unused
Flaming	15	Describes whether flames are rising from an entity 0 - None 1 - Flames present
	16-20	Unused
Frozen Status	21	Describes the frozen status of a Surface platform 0 - Not frozen

		1 - Frozen (Frozen entities should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
Power-plant Status	22	Describes the power-plant status of platform 0 - Power plant off 1 - Power plant on
State	23	Describes the state of a Surface platform 0 - Active 1 - Deactivated
	24-27	Unused
Spot Lights	28	Describes whether Spot Lights are on or off. 0 - Off 1 - On
Interior Lights	29	Describes whether Interior Lights are on or off. 0 - Off 1 - On
	30-31	Unused

4.3.1.4 Platforms of the Subsurface Domain

The bits of the Entity-Appearance field for subsurface platforms are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Paint Scheme	0	Describes the paint scheme of an entity 0 - Uniform color 1 - Camouflage
Mobility	1	Describes characteristics of mobility kill 0 - No mobility kill 1 - Mobility kill
	2	Unused
Damage	3-4	Describes the damaged visual appearance of an entity 0 - No damage 1 - Slight damage 2 - Moderate damage 3 - Destroyed
Smoke entity	5-6	Describes status or location of smoke emanating from an 0 - Not smoking 1 - Smoke plume rising from the entity 2 - 3 Unused

	7-8	Unused
Hatch	9-11	Describes the state of the hatch 0 - Not applicable 1 - Hatch is closed 2 - 3 Unused 4 - Hatch is open 5 - 7 Unused
Running Lights	12	Describes whether Running Lights are on or off. 0 - Off 1 - On
	13-14	Unused
Flaming	15	Describes whether flames are rising from an entity 0 - None 1 - Flames present
	16-20	Unused
Frozen Status	21	Describes the frozen status of a subsurface platform 0 - Not frozen 1 - Frozen (Frozen entities should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
Power-plant Status	22	Describes the power-plant status of a subsurface platform 0 - Power plant off 1 - Power plant on
State	23	Describes the state of a subsurface platform 0 - Active 1 - Deactivated
	24-31	Unused

4.3.1.5 Platforms of the Space Domain

The bits of the Entity-Appearance field for space platforms are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Paint Scheme	0	Describes the paint scheme of an entity 0 - Uniform color 1 - Camouflage
Mobility	1	Describes characteristics of mobility kills 0 - No mobility kill 1 - Mobility kill
	2	Unused
Damage	3-4	Describes the damaged visual appearance of an entity 0 - No damage 1 - Slight damage
Smoke	5-6	0 - Not smoking 1 - Smoke plume rising from the entity 2 - 3 Unused
	7-14	Unused
Flaming	15	Describes whether flames are rising from an entity 0 - None 1 - Flames present
	16-20	Unused
Frozen Status	21	Describes the frozen status of a space platform 0 - Not frozen 1 - Frozen (Frozen entities should not be dead-reckoned, i.e they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
Power-plant Status	22	Describes the power-plant status of a space platform 0 - Power plant off 1 - Power plant on
State	23	Describes the state of a space platform 0 - Active 1 - Deactivated
	24-31	Unused

4.3.2 Munition Kind

The bits of the Entity-Appearance field for munitions are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0-6	Unused
Trailing effects entity	7-8	Describes the size of the vapor trail trailing effect for the 0 - None 1 - Small 2 - Medium 3 - Large
	9 - 14	Unused
Flaming	15	Describes whether flames are rising from an entity 0 - None 1 - Flames present
Launch flash	16	Describes the presence of a guided munition's launch flash 0 - No launch flash present 1 - Launch flash present
	17 - 20	Unused
Frozen Status	21	Describes the frozen status of a guided munition 0 - Not frozen 1 - Frozen (Frozen entities should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
Power-plant Status	22	Describes the power-plant status of a guided munition 0 - Power plant off 1 - Power plant on
State	23	Describes the state of a guided munition 0 - Active 1 - Deactivated
	24-31	Unused

4.3.3 Life Forms Kind

The bits of the Entity -Appearance field for life forms are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Paint Scheme	0	Describes the paint scheme of an entity 0 - Uniform color 1 - camouflage
	1 - 2	Unused
Health	3-4	Describes the damaged visual appearance of an entity 0 - No injury 1 - Slight injury 2 - Moderate injury 3 - Fatal injury
	5 - 11	Unused
Flash Lights	12	Describes whether Flash Lights are on or off. 0 - Off 1 - On
	13-15	Unused
Life-form state	16-19	Describes the state of the life form 0 - 1 - Upright, standing still 2 - Upright, walking 3 - Upright, running 4 - Kneeling 5 - Prone 6 - Crawling 7 - Swimming 8 - Parachuting 9 - Jumping 10 - Sitting 11 - Squatting 12 - Crouching 13 - Wading 14-15 - Not used
	20	Unused
	21	Describes the frozen status of a life form 0 - Not frozen 1 - Frozen (Frozen entities should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
	22	Unused

State	23	Describes the state of a life form 0 - Active 1 - Deactivated
Weapon 1	24-25	Describes the position of the life form's primary weapon 0 - No primary weapon present 1 - Primary weapon is stowed 2 - Primary weapon is deployed 3 - Primary weapon is in firing position
Weapon 2	26-27	Describes the position of the life form's secondary weapon 0 - No secondary weapon is present 1 - Secondary weapon is stowed 2 - Secondary weapon is deployed 3 - Secondary weapon is in firing, position
Camouflage Type	28-29	Describes the type of camouflage 0 - Desert camouflage 1 - Winter camouflage 2 - Forest camouflage 3 - Unused
Concealed	30	Describes the type of concealment 0 - Not concealed 1 - Entity in a prepared concealed position
	31	Unused

4.3.4 Environmentals Kind

The bits of the Entity -Appearance field for environmentals are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 15	Unused
Density	16-19	Describes the density of the environmentals 0 - Clear 1 - Hazy 2 - Dense 3 - Very dense 4 - Opaque 5 - 15 Unused
Frozen Status	21	Describes the frozen status of a environmental object 0 - Not frozen 1 - Frozen (Frozen object should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
	22	Unused

State	23	Describes the state of a environmental object 0 - Active 1 - Deactivated
	24-31	Unused

4.3.5 Cultural Features Kind

The bits of the Entity -Appearance field for Cultural Features are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 2	Unused
Damage	3-4	Describes the damaged appearance of an entity 0 - No damage 1 - Slight damage 2 - Moderate damage 3 - Destroyed
Smoke	5-6	Describes status of smoke emanating from a Cultural Features object 0 - Not smoking 1 - Smoke plume rising from the object 2 - 3 Unused
	7 - 14	Unused
Flaming Features	15	Describes whether flames are rising from a Cultural object 0 - None 1 - Flames present
	16 - 20	Unused
Frozen Status	21	Describes the frozen status of a Cultural Features object 0 - not frozen 1 - Frozen (Frozen object should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
Internal-Heat Status	22	Describes the Internal-Heat status 0 - Internal-Heat off 1 - Internal-Heat on
State	23	Describes the state of a Cultural object 0 - Active 1 - Deactivated
	24-27	Unused

Exterior Lights	28	Describes whether Exterior Lights are on or off. 0 - Off 1 - On
Interior Lights	29	Describes whether Interior Lights are on or off. 0 - Off 1 - On
	30-31	Unused

4.3.6 Supplies Kind

The bits of the Entity -Appearance field for Supplies are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 31	Unused

4.3.7 Radios Kind

The bits of the Entity -Appearance field for Radios are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 31	Unused

4.3.8 Expendables Kind

The bits of the Entity-appearance field for Expendables are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 31	Unused

4.3.9 Sensor/Emitter Kind

The bits of the Entity Appearance field for Sensor/Emitters are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Paint Scheme	0	Describes the paint scheme of an entity 0 - Uniform color 1 - Camouflage
Mobility	1	Describes characteristics of mobility kill 0 - No mobility kill 1 - Mobility kill
Mission	2	Describes characteristics of mission kill (e.g. damaged antenna) 0 - No mission kill 1 - Mission kill
Damage	3-4	Describes the damaged appearance of an entity 0 - No damage 1 - Slight damage 2 - Moderate damage 3 - Destroyed
Smoke entity	5-6	Describes status or location of smoke emanating from an 0 - Not smoking 1 - Smoke plume rising from the entity 2 - Entity is emitting engine smoke 3 - Entity is emitting engine smoke, and smoke plume is rising from the entity
Trailing entity Effects	7-8	Describes the size of the dust cloud trailing effects for the 0 - None 1 - Small 2 - Medium 3 - Large
	9-11	Unused
Lights	12	Describes the status of lights on the sensor 0 - Off 1 - On
	13-14	Unused
Flaming	15	Describes whether flames are rising from the entity 0 - None 1 - Flames present
Antenna	16	Describes the elevated status of the sensor's antenna 0 - Not raised

		1 - Raised
Camouflage Type	17-18	Describes the type of camouflage 0 - Desert camouflage 1 - Winter camouflage 2 - Forest camouflage 3 - Unused
Concealed	19	Describes the type of concealment 0 - Not concealed 1 - Entity in a prepared concealed position (with netting, etc.)
	20	Unused
Frozen Status	21	Describes the frozen status of an entity 0 - Not frozen 1 - Frozen (Frozen entities should not be dead-reckoned, i.e. they should be displayed as fixed at the current location even if non-zero velocity, acceleration or rotation data is received from the frozen entity)
Power-plant Status	22	Describes the power-plant status of the sensor 0 - Power plant off 1 - Power plant on
State	23	Describes the state of an entity 0 - Active 1 - Deactivated
Tent	24	Describes the status of a tent extension 0 - Not extended 1 - Extended
	25	Unused
Blackout	26	Describes whether Blackout Lights are on or off 0 - Off 1 - On
	27-28	Unused
Interior Lights	29	Describes whether Interior Lights are on or off 0 - Off 1 - On
	30-31	Unused

4.4 Dead-Reckoning Algorithm

This section specifies the 8-bit enumeration for the Dead-Reckoning-Algorithm field in the Entity State PDU.

<u>Field Value</u>	<u>Dead-Reckoning Algorithm</u>
0	Other
1	Static (Entity does not move.)
2	DRM(F, P, W)
3	DRM(R, P, W)
4	DRM(R, V, W)
5	DRM(F, V, W)
6	DRM(F, P, B)
7	DRM(R, P, B)
8	DRM(R, V, B)
9	DRM(F, V, B)

4.5 Entity Marking

This section specifies the 8-bit enumeration for Character Set, found in the Entity-Marking field in the Entity State PDU.

<u>Field Value</u>	<u>Character set</u>
0	Unused
1	ASCII
2	Army Marking (CCTT) (see 4.5.1)
3	Digit Chevron (see 4.5.2)

4.5.1 Codes for Entity Marking Field (Army Marking - Character Set code = 2)

Byte 1

Byte 1 Character set code = 2

Bytes 2 through 7

Bytes 2 through 7 contain a Division or Corps designation and an encoded bumper number.

Byte 2 - Division /Corps designation

<u>Code</u>	<u>Division / Corp designation</u>
1	1st Cavalry
2	1st Infantry
11	Corps Assets
0 (for NA case)	

Byte 3 - High Level Unit

1 to 255 are codes for a High Level Unit such as Battalion, Brigade or Division headquarters within the Division/Corp specified by the contents of Byte 2 (for example, Byte 2 = 1 and Byte 3 = 1 means the 1-7CAV for 1st Cavalry Division)

Byte 3 - High Level Unit (Byte 2 = 1 - 1st Cavalry)

<u>Code</u>	<u>Unit Designation</u>	<u>Unit</u>
1	1-7CAV	1-7 Cavalry
2	2-5CAV	2-5 Cavalry
3	2-8CAV	2-8 Cavalry
4	3-32AR	3-32 Armor Reg
5	1-5CAV	1-5 Cavalry
6	1-8CAV	1-8 Cavalry
7	1-32AR	1-32 Armor Reg
8	1-67AR	1-67 Armor Reg
9	3-67AR	3-67 Armor Reg
10	3-41INF	3-41 Infantry
20	1-82F	1-82 Field Art
21	3-82F	3-82 Field Art
22	1-3F	1-3 Field Art

<u>Code</u>	<u>Unit Designation</u>	<u>Unit</u>
23	21F	21 Field Art
24	92F	92 Field Art
30	8E	8 Engineer
31	20E	20 Engineer
32	91E	91 Engineer
34	1-227AVN	1-227 Aviation
35	4-227AVN	4-227 Aviation
36	F-227AVN	F-227 Aviation
37	4-5ADA	4-5 Air Def Art
40	15MSB	15 Main Supp
41	27FSB	27 Forward Supp
42	115FSB	115 Forward Supp
43	215FSB	215 Forward Supp
45	312MI	312 Mil Intell.
46	13S	13 Signal
47	545MP	545 Mil Police
48	68CML	68 Chemical
50	1CAV	HHC 1st Cavalry
51-54	XBDE	HHC X BDE (X=1-4)
55	AVNBDE	HHC AVN BDE
56	E	HHD EN BDE
57	F	HHB DIVARTY
58	DSC	DISCOM

Byte 3 - High Level Unit (Byte 2 = 2 - 1st Infantry)

<u>Code</u>	<u>Unit Designation</u>	<u>Unit</u>
1	1-16INF	1-16 Infantry
2	2-16INF	2-16 Infantry
3	1-34AR	1-34 Armor
4	2-34AR	2-34 Armor
5	3-37AR	3-37 Armor
6	4-37AR	4-37 Armor
7	1-118INF	1-118 Infantry
8	4-118INF	4-118 Infantry
9	2-265AR	2-263 Armor
10	2-136IF	2-136 Infantry
20	1-5F	1-5 Field Art
21	4-5F	4-5 Field Art
22	1-178F	1-178 Field Art
23	6F	B/6 Field Art
24	25F	D/25 Field Art
30	1E	1 Engineer
31	70E	70 Engineer
32	4-1AVN	4-1 Aviation
33	1-1AVN	1-1 Aviation
34	2-3ADA	2-3 Air Def Art
35	1-4CAV	1-4 Cavalry
40	701MSB	701 Main Supp
41	101FSB	101 Forward Supp
42	201FSB	201 Forward Supp
43	163FSB	163 Forward Supp
45	101MI	101 Mil Intell
46	121S	121 Signal
47	1MP	1st Mil Police
48	12CML	12 Chemical
50	1INF	HHC 1st Infantry
51-54	XBDE	HHC X BDE (X=1-4)
55	AVNBDE	HHC AVN BDE
56	E	HHD EN BDE
57	F	HHD DIVARTY
58	DSC	DISCOM

Bytes 4 through 7

These are codes for the portion of a bumper number representing a) Company, Battery, Troop; b) Platoon, Section; and c) Vehicle.

Byte 4 - Company, Battery, Troop

<u>Code</u>	<u>Symbol</u>
65-77 (A-M)	A-M
113 (q)	HQ
98 (b)	HHB
99 (c)	HHC
100 (d)	HHD
116 (t)	HHT

Byte 5 - Platoon, Section

<u>Code</u>	<u>Symbol</u>
0-9	0-9

Byte 6 and 7 - Vehicle

<u>Code</u>	<u>Symbol</u>
0-9	0-9
32	blank

Bytes 8 through 12

Bytes 8 through 12 contain entity marking codes shown below for a digit / chevron marking system. Note that for character set 2 the digit / chevron marks are restricted to bytes 8 - 12 of the Marking field.

Bytes 8, 9, 10 and 12

<u>Code</u>	<u>Symbol</u>
0-9	0-9
10-19	0-9
69 (E)	E
101 (e)	<u>E</u>
83 (S)	S
115 (s)	<u>S</u>
88 (X)	X
120 (x)	<u>X</u>
32 (space)	blank

Byte 11

<u>Code</u>	<u>Symbol</u>
94	^
62	>
86	∨
60	<
	^
126(~)	∨
61	<>

Bytes 8 and 9 are codes for high level unit (for example, Battalion) marking.

Byte 10 is a code for company marking.

Byte 11 is a code for platoon marking.

Byte 12 is used for Dismounted Infantry Marking

4.5.2 Codes for Entity Marking Field (Digit / Chevron - Character Set code = 3

Byte 1

Byte 1 Character set code = 3

Byte 2 through 12

Bytes 2 through 12 contain digit/chevron codes.

<u>Code</u>	<u>Symbol</u>
0-9	0-9
10-19	<u>0-9</u>
69 (E)	<u>E</u>
101 (e)	<u>E</u>
83 (S)	<u>S</u>
115 (s)	<u>S</u>
88 (X)	<u>X</u>
120 (x)	<u>X</u>
32 (space)	blank
94	Ù
62	>
86 (V)	∨
60	<
	^
126 (~)	∨
61 (=)	< >

4.6 Entity Capabilities record

This section specifies the 32-bit Boolean array of the Entity Capabilities record in the Entity State PDU. Any individual bit set to one indicates that the entity has the corresponding capability.

<u>Bit</u>	<u>Name</u>	<u>Meaning</u>
0	Ammunition Supply	The Entity is able to supply some type of ammunition in response to an appropriate Service Request PDU.
1	Fuel Supply	The Entity is able to supply some type of fuel in response to an appropriate Service Request PDU.
2	Recovery	The Entity is able to provide recovery (e.g. towing) services in response to an appropriate Service Request PDU.
3	Repair	The Entity is able to supply certain repair services in response to an appropriate Service Request PDU.
4-31	TBD	TBD

4.7 Parameter Type

This section specifies the 32-bit enumeration for the Parameter-Type field in the Articulation-Parameter record of the Entity State and Detonation PDUs.

4.7.1 Parameter Type Designator

This section specifies the 8-bit enumeration for the Parameter Type Designator field in the articulated Parts Record.

<u>Field Value</u>	<u>Parameter Type Designator</u>
0	Articulated Part
1	Attached Part

4.7.2 Attached parts

Following are the enumeration values for attached-parts stations. These values are used when the Parameter Type Designator is equal to one, signifying an attached part.

<u>Field Value</u>	<u>Definition</u>
0	Nothing, Empty
1-511	Sequential IDs for model-specific stations
512-639	Fuselage Stations
640-767	Left-wing Stations
768-895	Right-wing Stations
896	M16A42 rifle
897	M249 SAW
898	M60 Machine gun
899	M203 Grenade Launcher
900	M136 AT4
901	M47 Dragon
902	AAWS-M Javelin
903	M18A1 Claymore Mine
904	MK19 Grenade Launcher
905	M2 Machine Gun
906-1023	Other attached parts

4.7.3 Articulated parts

Following are the enumeration values for articulated-parts parameters. These values are used when the Parameter Type Designator is equal to zero, signifying an articulated part.

<u>Field Value</u>	<u>Parameter</u>
x + 1	Position
x + 2	Position Rate
x + 3	Extension
x + 4	Extension Rate

<u>Field Value</u>	<u>Parameter</u>
x + 5	X
x + 6	X-rate
x + 7	Y
x + 8	Y-rate
x + 9	Z
x + 10	Z-rate
x + 11	Azimuth
x + 12	Azimuth rate
x + 13	Elevation
x + 14	Elevation Rate
x + 15	Rotation
x + 16	Rotation Rate

For these field values, x is the index of the particular articulated part shown below.

<u>Index</u>	<u>Articulated Part</u>
1024	rudder
1056	left flap
1088	right flap
1120	left aileron
1152	right aileron
1184	helicopter - main rotor
1216	helicopter - tail rotor
1248	other Aircraft Control Surfaces defined as needed
2048	periscope
2080	generic antenna
2112	snorkel
2144	other extendible parts defined as needed
3072	landing gear
3104	tail hook
3136	speed brake
3168	left weapon bay door
3200	right weapon bay doors
3232	tank or APC hatch
3264	wingsweep
3296	Bridge launcher
3328	Bridge section 1
3360	Bridge section 2
3392	Bridge section 3
3424	Primary blade 1
3456	Primary blade 2
3488	Primary boom

<u>Index</u>	<u>Articulated Part</u>
3520	Primary launcher arm
3552	other fixed position parts defined as needed
4096	Primary turret number 1
4128	Primary turret number 2
4160	Primary turret number 3
4192	Primary turret number 4
4224	Primary turret number 5
4256	Primary turret number 6
4288	Primary turret number 7
4320	Primary turret number 8
4352	Primary turret number 9
4384	Primary turret number 10
4416	Primary gun number 1
4448	Primary gun number 2
4480	Primary gun number 3
4512	Primary gun number 4
4544	Primary gun number 5
4576	Primary gun number 6
4608	Primary gun number 7
4640	Primary gun number 8
4672	Primary gun number 9
4704	Primary gun number 10
4736	Primary launcher 1
4768	Primary launcher 2
4800	Primary launcher 3
4832	Primary launcher 4
4864	Primary launcher 5
4896	Primary launcher 6
4928	Primary launcher 7
4960	Primary launcher 8
4992	Primary launcher 9
5024	Primary launcher 10
5056	Primary defense systems 1 ³
5088	Primary defense systems 2
5120	Primary defense systems 3
5152	Primary defense systems 4
5184	Primary defense systems 5
5216	Primary defense systems 6
5248	Primary defense systems 7
5280	Primary defense systems 8
5312	Primary defense systems 9
5344	Primary defense systems 10

² Point defense systems like Phalanx guns, or visible chaff, flare, or smoke dispensers.

<u>Index</u>	<u>Articulated Part</u>
5376	Primary radar 1 ⁴
5408	Primary radar 2
5440	Primary radar 3
5472	Primary radar 4
5504	Primary radar 5
5536	Primary radar 6
5568	Primary radar 7
5600	Primary radar 8
5632	Primary radar 9
5664	Primary radar 10
5696	Secondary turret number 1
5728	Secondary turret number 2
5760	Secondary turret number 3
5792	Secondary turret number 4
5824	Secondary turret number 5
5856	Secondary turret number 6
5888	Secondary turret number 7
5920	Secondary turret number 8
5952	Secondary turret number 9
5984	Secondary turret number 10
6016	Secondary gun number 1
6048	Secondary gun number 2
6080	Secondary gun number 3
6112	Secondary gun number 4
6144	Secondary gun number 5
6176	Secondary gun number 6
6208	Secondary gun number 7
6240	Secondary gun number 8
6272	Secondary gun number 9
6304	Secondary gun number 10
6336	Secondary launcher 1
6368	Secondary launcher 2
6400	Secondary launcher 3
6432	Secondary launcher 4
6464	Secondary launcher 5
6496	Secondary launcher 6
6528	Secondary launcher 7
6560	Secondary launcher 8
6592	Secondary launcher 9
6624	Secondary launcher 10
6656	Secondary defense systems 1
6688	Secondary defense systems 2
6720	Secondary defense systems 3
6752	Secondary defense systems 4
<u>Index</u>	<u>Articulated Part</u>

³ Any radar dish or movable antenna or sensor.

6784	Secondary defense systems 5
6816	Secondary defense systems 6
6848	Secondary defense systems 7
6880	Secondary defense systems 8
6912	Secondary defense systems 9
6944	Secondary defense systems 10
6976	Secondary radar 1
7008	Secondary radar 2
7040	Secondary radar 3
7072	Secondary radar 4
7104	Secondary radar 5
7136	Secondary radar 6
7168	Secondary radar 7
7200	Secondary radar 8
7232	Secondary radar 9
7264	Secondary radar 10

4.7.3.1 Example #1

To represent the articulation of a tank gun, azimuth of the turret is required as well as the elevation of the gun. This represents two articulated parts. The turret is attached to the tank. It has ID - Part Attached to = 0 because it is attached directly to the tank. We wish to dead reckon the position of the turret, so we require two articulation parameters for the turret: the azimuth and the azimuth rate. Azimuth will be articulation parameter #1 and azimuth rate will be articulation parameter #2. The gun is attached to the turret. It has ID - Part Attached to = 1 because it is attached to the turret. The gun has one articulation parameter, namely the elevation of the gun. Elevation will be articulation parameter #3.

For the turret, parameter #1 is the azimuth. The value to represent this is 4107: 4096 (primary turret) + 11 (azimuth of that turret). Parameter #2 is the azimuth rate. The value to represent this is 4108: 4096 + 12 (azimuth rate). For the gun, parameter #1 is elevation. The value to represent this is 4429: 4416 (primary gun) + 13 (elevation).

Suppose the turret is slewed but the elevation is unchanged. Then the three Articulation Parameter records would be:

Change indicator:	(value increment to indicate a change)
ID - Part Attached to:	0 (tank)
Parameter #1 type:	4107
Parameter value:	(an angle in radian)
Change indicator:	(value increment to indicate a change)
ID - Part Attached to:	0 (tank)
Parameter #2 type:	4108
Parameter value:	(rate in radian/sec)
Change indicator:	(value unchanged to indicate no change)
ID - Part Attached to:	1 (turret)
Parameter #1 type:	4213
Parameter value:	(zero)

4.7.3.2 Example #2

To represent an air-to-surface missile on an aircraft it is necessary to specify the station to which the missile is attached and the type of missile. For example, for a missile on the first left-wing station, the parameter type would be 0640. (The Parameter-Value field would indicate the type of munition attached to that station.) The Articulation Parameter record would then appear as:

Change indicator:	(value unchanged to indicate no change)
ID - Part Attached to:	0 (aircraft)
Parameter #1 type:	0640
Parameter value:	(type of missile from 64-bit munition type)

If the missile was fired, the next Entity State PDU would have an Articulation Parameter record with the following information on the launched missile:

Change indicator:	(value increment to indicate a change)
ID - Part Attached to:	0 (aircraft)
Parameter #1 type:	0640
Parameter value:	(type of missile from 64-bit munition type)

The change indicator specifies that the munition that was present is no longer present.

5.0 Warfare family

5.1 Burst Descriptor record

This section specifies the 16-bit enumerations for the Fuse (also called Detonator) and Warhead fields in the Burst Descriptor Record of the Fire and Detonation PDUs.

5.1.1 Warhead

Values for this field are:

<u>Field Value</u>	<u>Warhead</u>
0000	Other
0010	Cargo (Variable Submunitions)
0020	Fuel/Air Explosive
0030	Glass Beads
0031	1 um
0032	5 um
0033	10 um
1000	High Explosive (HE)
1100	HE, Plastic
1200	HE, Incendiary
1300	HE, Fragmentation
1400	HE, Antitank
1500	HE, Bomblets
1600	HE, Shaped Charge
1610	HE, Continuous Rod
1615	HE, Tungsten Ball
1620	HE, Blast Fragmentation
1625	HE, Steerable Darts with HE
1630	HE, Darts
1635	HE, Flechettes
1640	HE, Directed Fragmentation
1645	HE, Semi-Armor Piercing (SAP)
1650	HE, Shaped Charge Fragmentation
1655	HE, Semi-Armor Piercing, Fragmentation
1660	HE, Hollow Charge
1665	HE, Double Hollow Charge
1670	HE, General Purpose
1675	HE, Blast Penetrator
1680	HE, Rod Penetrator
1685	HE, Antipersonnel
2000	Smoke
3000	Illumination
4000	Practice
5000	Kinetic

<u>Field Value</u>	<u>Warhead</u>
6000	Mines
7000	Nuclear
7010	Nuclear, IMT
8000	Chemical, General
8100	Chemical, Blister Agent
8110	HD (Mustard)
8115	Thickened HD (Mustard)
8120	Dusty HD (Mustard)
8200	Chemical, Blood Agent
8210	AC (HCN)
8215	CK (CNCI)
8220	CG (Phosgene)
8300	Chemical, Nerve Agent
8310	VX
8315	Thickened VX
8320	Dusty VX
8325	GA (Tabun)
8330	Thickened GA (Tabun)
8335	Dusty GA (Tabun)
8340	GB (Sarin)
8345	Thickened GB (Sarin)
8350	Dusty GB (Sarin)
8355	GD (Soman)
8360	Thickened GD (Soman)
8365	Dusty GD (Soman)
8370	GF
8375	Thickened GF
8380	Dusty GF
9000	Biological
9100	Biological, Virus
9200	Biological, Bacteria
9300	Biological, Rickettsia
9400	Biological, Genetically Modified Micro-organisms
9500	Biological, Toxin

5.1.2 Fuse (detonator)

Values for this field are:

<u>Field Value</u>	<u>Type</u>
0000	Other
0010	Intelligent Influence
0020	Sensor
0030	Self-destruct
0040	Ultra Quick
0050	Body

<u>Field Value</u>	<u>Type</u>
0060	Deep Intrusion
0100	Multifunction
0200	Point Detonation (PD)
0300	Base Detonation (BD)
1000	Contact
1100	Contact, Instant (Impact)
1200	Contact, Delayed
1201	10 ms delay
1202	20 ms delay
1205	50 ms delay
1206	60 ms delay
1210	100 ms delay
1212	125 ms delay
1225	250 ms delay
1300	Contact, Electronic (Oblique Contact)
1400	Contact, Graze
1500	Contact, Crush
1600	Contact, Hydrostatic
1700	Contact, Mechanical
1800	Contact, Chemical
1900	Contact, Piezoelectric
1910	Contact, Point Initiating
1920	Contact, Point Initiating, Base Detonating
1930	Contact, Base Detonating
1940	Contact, Ballistic Cap and Base
1950	Contact, Base
1960	Contact, Nose
1970	Contact, Fitted in Standoff Probe
1980	Contact, Non-aligned
2000	Timed
2100	Timed, Programmable
2200	Timed, Burnout
2300	Timed, Pyrotechnic
2400	Timed, Electronic
2500	Timed, Base Delay
2600	Timed, Reinforced Nose Impact Delay
2700	Timed, Short Delay Impact
2701	10 ms delay
2702	20 ms delay
2705	50 ms delay
2706	60 ms delay
2710	100 ms delay
2712	125 ms delay
2725	250 ms delay
2800	Timed, Nose Mounted Variable Delay
2900	Timed, Long Delay Side

<u>Field Value</u>	<u>Type</u>
2910	Timed, Selectable Delay
2920	Timed, Impact
2930	Timed, Sequence
3000	Proximity
3100	Proximity, Active Laser
3200	Proximity, Magnetic (Magpolarity)
3300	Proximity, Active Radar (Doppler Radar)
3400	Proximity, Radio Frequency (RF)
3500	Proximity, Programmable
3600	Proximity, Programmable, Prefragmented
3700	Proximity, Infrared
4000	Command
4100	Command, Electronic, Remotely Set
5000	Altitude
5100	Altitude, Radio Altimeter
5200	Altitude, Air Burst
6000	Depth
7000	Acoustic
8000	Pressure
8010	Pressure, Delay
8100	Inert
8110	Dummy
8120	Practice
8130	Plug Representing
8150	Training
9000	Pyrotechnic
9010	Pyrotechnic, Delay
9100	Electro-optical
9110	Electromechanical
9120	Electromechanical, Nose
9200	Strikerless
9210	Strikerless, Nose Impact
9220	Strikerless, Compression-Ignition
9300	Compression-Ignition
9310	Compression-Ignition, Strikerless, Nose Impact
9400	Percussion
9410	Percussion, Instantaneous
9500	Electronic
9510	Electronic, Internally Mounted
9520	Electronic, Range Setting
9530	Electronic, Programmed
9600	Mechanical
9610	Mechanical, Nose
9620	Mechanical, Tail

5.2 Detonation PDU

This section specifies the 8-bit enumeration for the Detonation-Result field in the Detonation PDU.

<u>Field Value</u>	<u>Detonation Result</u>
0	Other
1	Entity Impact
2	Entity Proximate Detonation
3	Ground Impact
4	Ground Proximate Detonation
5	Detonation
6	None or No Detonation (Dud)
7	HE hit, small
8	HE hit, medium
9	HE hit, large
10	Armor-piercing hit
11	Dirt blast, small
12	Dirt blast, medium
13	Dirt blast, large
14	Water blast, small
15	Water blast, medium
16	Water blast, large
17	Air hit
18	Building hit, small
19	Building hit, medium
20	Building hit, large
21	Mine-clearing line charge
22	Environment object impact
23	Environment object proximate detonation
24	Water Impact
25	Air Burst

6.0 Logistics family

6.1 Service Request PDU

This section specifies the 8-bit enumeration for the Service-Type-Requested field in the Service-Request PDU.

<u>Field Value</u>	<u>Service Type</u>
0	Other
1	Resupply
2	Repair

6.2 Repair Complete PDU

This section specifies the 16-bit enumeration for the Repair field in the Repair Complete PDU.

6.2.1 General repair codes

These codes apply to all entities that may have requested repair:

<u>Field Value</u>	<u>Meaning</u>
0	no repairs performed
1	all requested repairs performed

6.2.2 Drive train

<u>Field Value</u>	<u>System Repaired</u>
10	motor / engine
20	starter
30	alternator
40	generator
50	battery
60	engine-coolant leak
70	fuel filter
80	transmission-oil leak
90	engine-oil leak
100	pumps
110	filters
120	transmission
130	brakes
140	suspension system
150	oil filter
160-999	TBD

6.2.3 Hull/Airframe/B

<u>Field Value</u>	<u>System Repaired</u>
1000	hull
1010	airframe
1020	truck body
1030	tank body
1040	trailer body
1050	turret
1060-1499	TBD

6.2.4 Interfaces with environment

<u>Field Value</u>	<u>System to Repair</u>
1500	propeller
1520	filters
1540	wheels
1550	tire
1560	track
1570-1999	TBD

6.2.5 Weapons

<u>Field Value</u>	<u>System Repaired</u>
2000	gun elevation drive
2010	gun stabilization system
2020	gunner's primary sight (GPS)
2030	commander's extension to the GPS
2040	loading mechanism
2050	gunner's auxiliary sight
2060	gunner's control panel
2070	gunner's control assembly handle(s)
2090	commander's control handles/assembly
2100	commander's weapon station
2110	commander's independent thermal viewer (CITV)
2120	general weapons
2121-3999	TBD

6.2.6 Fuel systems

<u>Field Value</u>	<u>System Repaired</u>
4000	fuel transfer pump
4010	fuel lines
4020	gauges
4030	general fuel system
4031-4499	TBD

6.2.7 Electronics

<u>Field Value</u>	<u>System Repaired</u>
4500	electronic warfare systems
4600	detection systems
4610	radio frequency
4620	microwave
4630	infrared
4640	laser
4700	range finders
4710	range-only radar
4720	laser range finder
4800	electronic systems
4810	radio frequency
4820	microwave
4830	infrared
4840	laser
5000	radios
5010	communication systems
5100	intercoms
5200	encoders
5250	encryption devices
5300	decoders
5350	decryption devices
5500	computers
6000	navigation and control systems
6500	fire control systems
6501-7999	TBD

6.2.8 Life support systems

<u>Field Value</u>	<u>System Repaired</u>
8000	air supply
8010	filters
8020	water supply
8030	refrigeration system
8040	chemical, biological, and radiological protection
8050	water wash down systems
8060	decontamination systems
8070-8999	TBD

6.2.9 Hydraulic systems and actuators

<u>Field Value</u>	<u>System Repaired</u>
9000	water supply
9010	cooling system
9020	winches
9030	catapults
9040	cranes
9050	launchers

6.2.10 Auxiliary craft

<u>Field Value</u>	<u>System Repaired</u>
9060-9999	TBD
10000	life boats
10010	landing craft
10020	ejection seats
10030-10499	other auxiliary craft to be defined

6.3 Repair Response PDU

This section specifies the 8-bit enumeration for the Repair-Result field in the Repair-Response PDU.

<u>Field Value</u>	<u>Result of Repair</u>
0	other
1	repair ended
2	invalid repair
3	repair interrupted
4	service canceled by the supplier

7.0 Simulation Management family

7.1 Datum Specification record

This section specifies the 32-bit enumerations for Datum ID in the Datum Specification Record, as found in the Action-Request, Action-Response, Data-Query, Set-Data, Data, Event-Report, and Message PDUs. Also shown for each datum are its type, length, units, and an abbreviated description.

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
10000	Identification				
11000	Entity Type				
11100	Concatenated				
11110	Kind	Unsigned Integer	8		
11120	Domain	Unsigned Integer	8		
11130	Country	Unsigned Integer	16		
11140	Category	Unsigned Integer	8		
11150	Subcategory	Unsigned Integer	8		
11160	Specific	Unsigned Integer	8		
11170	Extra	Unsigned Integer	8		
11200	Force ID	Unsigned Integer	8		
11300	Description				
12000	Alternative Entity Type				
12110	Kind	Unsigned Integer	8		
12120	Domain	Unsigned Integer	8		
12130	Country	Unsigned Integer	16		
12140	Category	Unsigned Integer	8		
12150	Subcategory	Unsigned Integer	8		
12160	Specific	Unsigned Integer	8		
12170	Extra	Unsigned Integer	8		
12300	Description				
13000	Entity Marking				
13100	Entity Marking Characters	String	80		
13200	Crew ID	String	80		
14000	Task Organization				
14200	Regiment Name	String			
14300	Battalion Name	String			
14400	Company Name	String			
14500	Platoon Name				
14520	Squad Name				
14540	Team Name				
14600	Bumper Number				
14700	Vehicle Number				
14800	Unit Number				
15000	DIS Identity				
15100	DIS Site ID				
15200	DIS Host ID				
15300	DIS Entity ID				
15400	Mount Intent	Datum Specification Sub-record	544		
15500	Tether-Unthether Command ID	Unsigned Integer	32		
15510	Teleport Entity Data Record	Variable record			

Section 7
Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
15600	DIS Aggregate ID (Set if communication to aggregate)	Unsigned Integer	32		Integer Aggregate ID
20000	Loads				
21000	Crew Members				
21100	Crew Member ID				
21200	Health				
21300	Job Assignment	String			
23000	Fuel				
23100	Quantity			Liters	
23105	Quantity			Gallons	
24000	Ammunition				
24001	120-mm HEAT, quantity			Rounds	
24002	120-mm SABOT, quantity			Rounds	
24003	12.7-mm M8, quantity			Rounds	
24004	12.7-mm M20, quantity			Rounds	
24005	7.62-mm M62, quantity			Rounds	
24006	M250 UKL8A1, quantity			Grenades	
24007	M250 UKL8A3, quantity			Grenades	
24008	7.62-mm M80, quantity			Rounds	
24009	12.7-mm, quantity			Rounds	
24010	7.62-mm, quantity			Rounds	
24060	Mines, quantity			Mines	
24100	Type				
24110	Kind				
24120	Domain				
24130	Country				
24140	Category				
24150	Subcategory				
24160	Extra				
24300	Description				
25000	Cargo				
26000	Vehicle Mass	Unsigned Integer	32	Kilograms	
27000	Supply Quantity				
28000	Armament	Boolean			
30000	Status				
30010	Activate entity	Integer	32		0 Unspecified 1 Activate platform
30100	Subscription State	Enumeration	8		
31000	Position				
31010	Route (Waypoint) type	Integer	32		0 Default 1 Orbit
31100	MilGrid10				
31200	Geocentric Coordinates				
31210	X	Unsigned Integer	32	Meters	
31220	Y	Unsigned Integer	32	Meters	
31230	Z	Unsigned Integer	32	Meters	
31300	Latitude	Unsigned Integer	32	Degrees	
31400	Longitude	Unsigned Integer	32	Degrees	
31500	Line of Sight				
31510	X	Unsigned Integer	32	meters	
31520	Y	Unsigned Integer	32	Meters	

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Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
31530	Z	Unsigned Integer	32	Meters	
31600	Altitude	Integer	32	Meters	
31700	Destination Latitude	Integer	32	(10000 th) Degrees	
31800	Destination Longitude	Integer	32	(10000 th) Degrees	
31900	Destination Altitude	Integer	32	Meters	
32000	Orientation	Variable Datum	96	Radians	3-32bit Floating Point
32100	Hull Heading Angle	Unsigned Integer	32	Degrees	
32200	Hull Pitch Angle	Unsigned Integer	32	Degrees	
32300	Roll Angle	Unsigned Integer	32	Degrees	
32500	X	Unsigned Integer	32	Degrees	
32600	Y	Unsigned Integer	32	Degrees	
32700	Z	Unsigned Integer	32	Degrees	
33000	Appearance				
33100	Ambient Lighting				
33101	Lights				
33200	Paint Scheme				
33300	Smoke				
33400	Trailing Effects				
33500	Flaming				
33600	Marking				
33710	Mine Plows Attached				
33720	Mine Rollers Attached				
33730	Tank Turret Azimuth			Degrees Rel 2 Ion	
34000	Failures and Malfunctions				
34100	Age			Miles	
34110	Kilometers				
35000	Damage				
35050	Cause				
35100	Mobility Kill				
35200	Fire-Power Kill				
35300	Personnel Casualties				
36000	Velocity				
36100	X-velocity			Meters/second	
36200	Y-velocity			Meters/second	
36300	Z-velocity			Meters/second	
36400	Speed	Floating Point	32	Meters/second	
37000	Acceleration				
37100	X-acceleration				
37200	Y-acceleration				
37300	Z-acceleration				
38100	Engine Status				
39000	Primary Target Line (PTL)	Unsigned Integer	32	Degrees	
40000	Exercise				
40010	Exercise State	Variable Record	64		
40015	Restart/Refresh	Unsigned Integer	32		0 Undefined 1 Restart
40020	AFATDS File Name	Variable Record			1..40 ASCII Characters
41000	Terrain Database	Unsigned Integer	32		
41001					

Section 7
Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
42000	Missions				
42100	Mission ID				
42200	Mission Type				
42300	Mission Request Time Stamp				
43000	Exercise Description	String			
43100	Name	String			
43200	Entities	Integer			
43300	Version				
43410	Guise Mode	Unsigned Integer	32		
43420	Simulation Application Active Status	Unsigned Integer	16		0 Backup 1 Primary
43430	Simulation Application Role Record	Variable Record	64		
43440	Simulation Application State	Variable Record	64		
44000	Visual Output Mode				
44100	Simulation Manager Role	Variable Record			
44110	Simulation Manager Site ID	Unsigned Integer	16		
44120	Simulation Manager Applic. ID	Unsigned Integer	16		
44130	Simulation Manager Entity ID	Unsigned Integer	16		
44140	Simulation Manager Active Status	Unsigned Integer	16		0 Backup 1 Primary
44200	After Active Review Role	Variable Record			
44210	After Active Review Site ID	Unsigned Integer	16		
44220	After Active Applic. ID	Unsigned Integer	16		
44230	After Active Review Entity ID	Unsigned Integer	16		
44240	After Active Review Active Status	Unsigned Integer	16		0 Backup 1 Primary
44300	Exercise Logger Role	Variable Record			
44310	Exercise Logger Site ID	Unsigned Integer	16		
44320	Exercise Logger Applic. ID	Unsigned Integer	16		
44330	Exercise Entity ID	Unsigned Integer	16		
44340	Exercise Logger Active Status	Unsigned Integer	16		0 Backup 1 Primary
44400	Synthetic Environment Manager Role	Variable Record			
44410	Synthetic Environment Manager Site ID	Unsigned Integer	16		
44420	Synthetic Environment Manager Applic. ID	Unsigned Integer	16		
44430	Synthetic Environment Manager Entity ID	Unsigned Integer	16		
44440	Synthetic Environment Manager Active Status	Unsigned Integer	16		0 Backup 1 Primary
44500	SIMNET-DIS Translator Role	Variable Record			
44510	SIMNET-DIS Translator Site ID	Unsigned Integer	16		
44520	SIMNET-DIS Translator Applic. ID	Unsigned Integer	16		
44530	SIMNET-DIS Translator Entity ID	Unsigned Integer	16		
44540	SIMNET-DIS Translator Active Status	Unsigned Integer	16		0 Backup 1 Primary
45000	Application Rate	Floating point	32		
45005	Application Time	Clock Time Record	64		See IEEE Std1278.1-1995 section 5.2.8

Section 7
Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
45010	Application Timestep	Timestamp	32		See IEEE Std 1278.1-1995 section 5.2.31
45020	Feedback Time	Timestamp	32		See IEEE Std 1278.1-1995 section 5.2.31
45030	Simulation Rate	Floating Point	32		
45040	Simulation Time	Clock Time Record	64		See IEEE Std 1278.1-1995 section 5.2.8
45050	Simulation Timestep	Timestamp	32		See IEEE Std 1278.1-1995 section 5.2.31
45060	Time Interval	Timestamp	32		See IEEE Std 1278.1-1995 section 5.2.31
45070	Time Latency	Timestamp	32		See IEEE Std 1278.1-1995 section 5.2.31
45080	Time Scheme	Unsigned Integer	32		1 Real time 2 Scaled time 3 Scaled and stepped time
46000	Exercise Elapsed Time	Unsigned integer	32	Seconds	Time since exercise started (takes into account exercise pauses and scaled exercise time)
46010	Elapsed Time	Unsigned integer	32	Seconds	Time since exercise started (real time, does not take into account exercise pauses and scaled exercise time)
50000	Environment				
51000	Weather				
51010	Weather Condition	Unsigned Integer	32	N/A	0 = Clear 1 = Cloudy 2 = Overcast 3 = Foggy 4 = Raining
51100	Thermal Condition				
51110	Thermal Visibility	Floating Point	32	Meters	
51111	Thermal Visibility	Unsigned integer	32	Meters	
52000	Time				
52001	Time	String	56		Format "HHMMSS"
52100	Time of Day, Discrete				
52200	Time of Day, Continuous				
52300	Time Mode				
52305	Time Scene				

Section 7
Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
52310	Current Hour				
52320	Current Minute				
52330	Current Second				
52340	Azimuth				
52350	Maximum Elevation				
52360	Time Zone				
52370	Time Rate	Integer	32		1000 * Ratio (Simulation Time / Wall Clock Time)
52380	The number of simulation seconds since the start of the exercise (simulation time)	Integer	32	Seconds	
52400	Time Sunrise Enabled				
52410	Sunrise Hour				
52420	Sunrise Minute				
52430	Sunrise Second				
52440	Sunrise Azimuth				
52500	Time Sunset Enabled				
52510	Sunset Hour				
52511	Sunset Hour				
52520	Sunset Minute				
52530	Sunset Second				
52531					
52600	Date				
52601	Date (European)	String	72		Format "DDMMYYYY"
52602	Date (US)	String	72		Format "MMDDYYYY"
52610	Month				
52620	Day				
52630	Year				
53000	Clouds				
53050	Cloud Layer Enable				
53060	Cloud Layer Selection				
53100	Visibility				
53200	Base Altitude	Unsigned Integer	32	Meters	
53250	Base Altitude			Feet	
53300	Ceiling	Unsigned Integer	32	Meters	
53350	Ceiling			Feet	
53400	Characteristics				
53410	Concentration Length	Floating Point	32	milligrams/meter ²	
53420	Transmittance	Floating Point	32		
53430	Radiance	Floating Point	32	microwatts/centimeter ² /steradian	
54000	Precipitation	Boolean	32		
54100	Rain	Boolean			
55000	Fog	Boolean			
55100	Visibility			Meters	
55101	Visibility	Unsigned integer	32	Meters	
55105	Visibility			Miles	
55200	Density				
55300	Base				

Section 7
Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
55401	View Layer from above.				
55410	Transition Range				
55420	Bottom			Meters	
55425	Bottom			Feet	
55430	Ceiling			Meters	
55435	Ceiling			Feet	
56000	Heavenly Bodies				
56100	Sun				
56105	Sun Visible	Unsigned integer	32	N/A	0 Not visible 1 Visible
56110	Position				
56111	Sun Position Elevation, Degrees	Floating Point	32	Degrees	
56120	Position Azimuth				
56121	Sun Position Azimuth, Degrees	Floating Point	32	Degrees	Relative to True North
56130	Position Elevation				
56140	Position Intensity				
56200	Moon				
56205	Moon Visible	Unsigned integer	32	N/A	0 Not visible 1 Visible
56210	Position				
56220	Position Azimuth				
56221	Moon Position Azimuth, Degrees	Floating Point	32	Degrees	Relative to True North
56230	Position Elevation				
56231	Moon Position Elevation, Degrees	Floating Point	32	Degrees	
56240	Position Intensity				
56310	Horizon				
56320	Horizon Azimuth				
56330	Horizon Elevation				
56340	Horizon Heading				
56350	Horizon Intensity				
57200	Humidity				
57300	Visibility				
57400	Winds				
57410	Speed				
57411	Wind Speed, Knots	Floating Point	32	Knots	
57420	Wind Direction	Floating Point	32	Radians	Relative to True North
57421	Wind Direction, Degrees	Floating Point	32	Degrees	Relative to True North
57500	Rainsoak				
57610	Tide Speed	Floating Point	32	Meters/second	
57611	Tide Speed, Knots	Floating Point	32	Knots	
57620	Tide Direction	Floating Point	32	Radians	Relative to True North
57621	Tide Direction, Degrees	Floating Point	32	Degrees	Relative to True North
58000	Haze	Boolean			
58100	Visibility			Meters	
58105	Visibility			Miles	
58200	Density				

Section 7
Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
58430	Ceiling			Meters	
58435	Ceiling			Feet	
59000	Contaminants and Obscurants				
59100	Contaminant/Obscurant Type	Unsigned Integer	32		
59110	Persistence	Enumeration	8		0 Neat 1 Dry 2 Thickened
59115	Chemical Dosage	Floating Point	32	milligrams/meter ³ /minute	
59120	Chemical Air Concentration	Floating Point	32	milligrams/meter ³	
59125	Chemical Ground Deposition	Floating Point	32	milligrams/meter ²	
59130	Chemical Maximum Ground Deposition	Floating Point	32	milligrams/meter ²	
59135	Chemical Dosage Threshold	Floating Point	32	milligram/meter ³ /minute	
59140	Biological Dosage	Floating Point	32	particles/liter of air/minute	
59145	Biological Air Concentration	Floating Point	32	particles/liter of air	
59150	Biological Dosage Threshold	Floating Point	32	particles/liter of air/minute	
59155	Biological Binned Particle Count	Enumeration	8		1 Low (.5-2) 2 Detection (2-.10) 3 High (10-15)
59160	Radiological Dosage	Floating Point	32		
60000	Communications				
61100	Channel Type				
61101	Channel Type				
61200	Channel Identification				
61300	Alpha Identification				
61301					
61400	Radio Identification				
61401					
61500	Land Line Identification				
61600	Intercom Identification				
61700	Group Network Channel Number				
62100	Radio Communications Status				
62200	Stationary Radio Transmitters Default Time	Unsigned Integer			
62300	Moving Radio Transmitters Default Time	Unsigned Integer			
62400	Stationary Radio Signals Default Time				
62500	Moving Radio Signal Default Time				
63101	Radio Initialization Transec Security Key	Variable Record			
63102	Radio Initialization Internal Noise Level	Variable Record			
63103	Radio Initialization Squelch Threshold	Variable Record			
63104	Radio Initialization Antenna Location	Variable Record			
63105	Radio Initialization Antenna Pattern Type	Variable Record			
63106	Radio Initialization Antenna Pattern Length	Variable Record			
63107	Radio Initialization Beam Definition	Variable Record			

Section 7
Simulation Management family

ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
63108	Radio Initialization Transmit Heartbeat Time	Variable Record			
63109	Radio Initialization Transmit Distance Threshold	Variable Record			
63110	Radio Channel Initialization Lockout ID	Variable Record			
63111	Radio Channel Initialization Hopset ID	Variable Record			
63112	Radio Channel Initialization Preset Frequency	Variable Record			
63113	Radio Channel Initialization Frequency Sync Time	Variable Record			
63114	Radio Channel Initialization Comsec Key	Variable Record			
63115	Radio Channel Initialization Alpha	Variable Record			
70000	Algorithm Parameters				
71000	Dead Reckoning Algorithm (DRA)				
71100	DRA Location Threshold	Unsigned Integer	32		
71200	DRA Orientation Threshold				
71300	DRA Time Threshold				
72000	Simulation Management Parameters				
72100	Checkpoint Interval				
72600	Transmitter Time Threshold				
72700	Receiver Time Threshold				
73000	Interoperability Mode				
74000	SIMNET Data Collection	Variable Record ⁵			
75000	Event ID				
75100	Source Site ID				
75200	Source Host ID				
90000	Articulated Parts				
90001					
90050	Part ID				
90070	Index (See 4.7.2)				
90100	Position				
90200	Position Rate				
90300	Extension				
90400	Extension Rate				
90500	X				
90600	X-rate				
90700	Y				
90800	Y-rate				
90900	Z				
91000	Z-rate				
91100	Azimuth				
91200	Azimuth Rate				
91300	Elevation				
91400	Elevation Rate				
91500	Rotation				
91600	Rotation Rate				
100001	DRA Angular X-Velocity				
100002	DRA Angular Y-Velocity				

⁵ The variable-datum-value field consists of: 32-bit unsigned integer, Data Collection Type; 32-bit unused; and multiple of 64 bits, SIMNET Data Collection Variant.

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ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
100003	DRA Angular Z-Velocity				
100004	Appearance, Trailing Effects				
100005	Appearance, Hatch				
100008	Appearance, Character Set				
100010	Capability, Ammunition Supplier				
100011	Capability, Miscellaneous Supplier				
100012	Capability, Repair Provider				
100014	Articulation Parameter				
100047	Articulation Parameter Type				
100048	Articulation Parameter Value				
100058	Time of Day—Scene				
100061	Latitude-North (Location of weather cell)	Unsigned Integer			
100063	Longitude-East (Location of weather cell)	Unsigned integer			
100068	Tactical Driver Status	Unsigned Integer			0 Operational 1 Non-operational 2 Unknown 3 Not available
100100	Sonar System Status				
100162	Latitude-South (Location of weather cell)	Unsigned Integer			
100164	Longitude-West (location of weather cell)	Unsigned Integer			
100165	Accomplished accept	Boolean			0 Accept 1 Non-accept
100165	CD ROM Number (Disk ID for terrain)	Integer			
100167	Altitude	Floating point			
100169	Tactical System Status	Unsigned Integer			0 Operational 1 Non-operational 2 Unknown 3 Not available
100170	JTIDS Status	Unsigned Integer			0 Operational 1 Non-operational 2 Unknown 3 Not available
100171	TADIL-J Status	Unsigned Integer			0 Operational 1 Non-operational 2 Unknown 3 Not available
100172	DSDD Status	Unsigned Integer			0 Operational 1 Non-operational 2 Unknown 3 Not available
100200	Weapon System Status				
100218	Script Number	Integer	32		
100300	Entity/Track/Update Data				
100400	Local/Force Training				
100500	Entity/Track Identity Data				
100510	Entity for Track Event	Variable	48		Entity being tracked
100520	IFF (Friend-Foe) status	Unsigned Integer	32		0 Unidentified / Unknown

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ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
100600	Engagement Data				1 Perceived Friendly 2 Perceived Hostile
100610	Target Latitude	Integer	32	(10000 th) Degrees	
100620	Target Longitude	Integer	32	(10000 th) Degrees	
100631	Area of Interest (Ground Impact Circle) Center Latitude	Integer	32	(10000 th) Degrees	
100632	Area of Interest (Ground Impact Circle) Center Longitude	Integer	32	(10000 th) Degrees	
100633	Area of Interest (Ground Impact Circle) Radius	Unsigned Integer	32	Meters	
100634	Area of Interest Type	Unsigned Integer	32		0 Unspecified 1 TBM Defense
100640	Target Aggregate ID	Variable	48		
100650	GIC Identification Number	Unsigned Integer	32		
100660	Estimated Time of Flight to TBM Impact	Floating Point	32		Seconds from time in PDU header
100661	Estimated Intercept Time	Floating Point	32		Seconds from time in PDU header
100662	Estimated Time of Flight to Next Waypoint	Floating Point	32		Seconds from time in PDU header
100700	Entity/Track Equipment Data				
100800	Emission/EW Data				
100900	Appearance Data				
101000	Command/Order Data				
101100	Environmental Data				
101200	Significant Event Data				
101300	Operator Action Data				
101310	ADA Engagement Mode	Unsigned Integer	32		0 Air 1 ATBM
101320	ADA Shooting Status	Unsigned Integer	32		0 Can not engage 1 Can engage
101321	ADA Mode	Unsigned Integer	32		0 Shut down 1 Active
101330	ADA Radar Status	Unsigned Integer	32		0 Off 1 On 2 Momentary On
101340	Shoot Command	Unsigned Integer	32		0 Undefined > 0 Number of Shots to take
101350	ADA Weapon Status	Unsigned Integer	32		0 None 1 Free 2 Tight 3 Hold
101360	ADA Firing Discipline	Unsigned Integer	32		0 SLS_AB T 1 Shoot 2_AB T 2 Lash Mode 3 SLS_TM 4 Shoot2_TM 5 Default

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ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
101370	Order Status	Unsigned Integer	32		0 Cancel Engagement 1 Engage Assignment
101400	Time Synchronization				
101500	Tomahawk Data				
102100	Number of Detonations	Unsigned Integer			
102200	Number of Intercepts	Unsigned Integer			
200201	OBT Control MT-201	Variable Record	64		
200202	Sensor Data MT-202	Variable Record	64		
200203	Environmental Data MT-203	Variable Record	64		
200204	Ownship Data MT-204	Variable Record	128		
200205	Acoustic Contact Data MT-205	Variable Record	288		
200207	Sonobuoy Data MT-207	Variable Record	64		
200210	Sonobuoy Contact Data MT-210	Variable Record	64		
200211	Helo Control MT-211	Variable Record	64		
200213	ESM Control Data	Variable Record	96		
200214	ESM Contact Data MT-214	Variable Record	192		
200215	ESM Emitter Data MT-215	Variable Record	64		
200216	Weapon Definition Data MT-217	Variable Record	224		
200217	Weapon Preset Data MT-217	Variable Record	256		
200301	OBT Control MT-301	Variable Record	64		
200302	Sensor Data MT-302	Variable Record	64		
200303	Environmental Data MT-303m	Variable Record	64		
200304	Ownship Data MT-304	Variable Record	64		
200305	Acoustic Contact Data MT-305	Variable Record	288		
200307	Sonobuoy Data MT-307	Variable Record	128		
200310	Sonobuoy Contact Data MT-310	Variable Record	64		
200311	Helo Scenario / Equipment Status	Variable Record	224		
200313	ESM Control Data MT-313	Variable Record	96		
200314	ESM Contact Data MT-314	Variable Record	192		
200315	ESM Emitter Data MT-315	Variable Record	64		
200316	Weapon Definition Data MT-316	Variable Record	256		
200317	Weapon Preset Data MT-317	Variable Record	256		
200400	Pairing/Association (eMT-56)	Variable Record			
200401	Pointer (eMT-57)	Variable Record			
200402	Reporting Responsibility (eMT-58)	Variable Record			
200403	Track Number (eMT-59)	Variable Record			
200404	ID for Link-11 Reporting (eMT-60)	Variable Record			
200405	Remote Track (eMT-62)	Variable Record			
200406	Link-11 Error Rate (eMT-63)	Variable Record			
200407	Track Quality (eMT-64)	Variable Record			
200408	Gridlock (eMT-65)	Variable Record			
200409	Kill (eMT-66)	Variable Record			
200410	Track ID Change / Resolution (eMT-68)	Variable Record			
200411	Weapons Status (eMT-69)	Variable Record			
200412	Link-11 Operator (eMT-70)	Variable Record			
200413	Force Training Transmit (eMT-71)	Variable Record			
200414	Force Training Receive (eMT-72)	Variable Record			
200415	Interceptor Amplification (eMT-75)	Variable Record			
200416	Consumables (eMT-78)	Variable Record			
200417	Link-11 Local Track Quality (eMT-95)	Variable Record			

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ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
200418	DLRP (eMT-19)	Variable Record			
200419	Force Order (eMT-52)	Variable Record			
200420	Wilco / Cantco (eMT-53)	Variable Record			
200421	EMC Bearing (eMT-54)	Variable Record			
200422	Change Track Eligibility (eMT-55)	Variable Record			
200423	Land Mass Reference Point	Variable Record			
200424	System Reference Point	Variable Record			
200425	PU Amplification	Variable Record			
200426	Set/Drift	Variable Record			
200427	Begin Initialization (MT-1)	Variable Record			
200428	Status and Control (MT-3)	Variable Record			
200429	Scintillation Change (MT-39)	Variable Record			
200430	Link 11 ID Control (MT-61)	Variable Record			
200431	PU Guard List	Variable Record			
200432	Winds Aloft (MT-14)	Variable Record			
200433	Surface Winds (MT-15)	Variable Record			
200434	Sea State (MT-17)	Variable Record			
200435	Magnetic Variation (MT-37)	Variable Record			
200436	Track Eligibility (MT-29)	Variable Record			
200437	Training Track Notification	Variable Record			
200501	Tacan Data (MT-32)	Variable Record			
200502	Interceptor Amplification (MT-75)	Variable Record			
200503	Tacan Assignment (MT-76)	Variable Record			
200504	Autopilot Status (MT-77)	Variable Record			
200505	Consumables (MT-78)	Variable Record			
200506	Downlink (MT-79)	Variable Record			
200507	TIN Report (MT-80)	Variable Record			
200508	Special Point Control (MT-81)	Variable Record			
200509	Control Discretes (MT-82)	Variable Record			
200510	Request Target Discretes(MT-83)	Variable Record			
200511	Target Discretes (MT-84)	Variable Record			
200512	Reply Discretes (MT-85)	Variable Record			
200513	Command Maneuvers (MT-86)	Variable Record			
200514	Target Data (MT-87)	Variable Record			
200515	Target Pointer (MT-88)	Variable Record			
200516	Intercept Data (MT-89)	Variable Record			
200517	Decrement Missile Inventory (MT-90)	Variable Record			
200518	Link-4A Alert (MT-91)	Variable Record			
200519	Strike Control (MT-92)	Variable Record			
200521	Speed Change (MT-25)	Variable Record			
200522	Course Change (MT-26)	Variable Record			
200523	Altitude Change (MT-27)	Variable Record			
240000	Other	integer	00		
240001	Mass Of The Vehicle	real	32		
240002	Force ID	integer	8		
240003	Entity Type Kind	integer	8		
240004	Entity Type Domain	integer	8		
240005	Entity Type Country	integer	16		
240006	Entity Type Category	integer	8		
240007	Entity Type Sub Category	integer	8		
240008	Entity Type Specific	integer	8		
240009	Entity Type Extra	integer	8		

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ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
240010	Alternative Entity Type Kind	integer	8		
240011	Alternative Entity Type Domain	integer	8		
240012	Alternative Entity Type Country	integer	16		
240013	Alternative Entity Type Category	integer	8		
240014	Alternative Entity Type Sub Category	integer	8		
240015	Alternative Entity Type Specific	integer	8		
240016	Alternative Entity Type Extra	integer	8		
240017	Entity Location X	real	64		
240018	Entity Location Y	real	64		
240019	Entity Location Z	real	64		
240020	Entity Linear Velocity X	real	32		
240021	Entity Linear Velocity Y	real	32		
240022	Entity Linear Velocity Z	real	32		
240023	Entity Orientation Psi	real	32		
240024	Entity Orientation Theta	real	32		
240025	Entity Orientation Phi	real	32		
240026	Dead Reckoning Algorithm	integer	8		
240027	Dead Reckoning Linear Acceleration X	real	32		
240028	Dead Reckoning Linear Acceleration Y	real	32		
240029	Dead Reckoning Linear Acceleration Z	real	32		
240030	Dead Reckoning Angular Velocity X	real	32		
240031	Dead Reckoning Angular Velocity Y	real	32		
240032	Dead Reckoning Angular Velocity Z	real	32		
240033	Entity Appearance	integer	32		
240034	Entity Marking Character Set	integer	8		
240035	Entity Marking 11 Bytes	character	88		
240036	Capability	integer	32		
240037	Number Articulation Parameters	integer	8		
240038	Articulation Parameter ID	integer	32		
240039	Articulation Parameter Type	integer	32		
240040	Articulation Parameter Value	real	64		
240041	Type Of Stores	integer	32		
240042	Quantity Of Stores	integer	32		
240043	Fuel Quantity	real	32		
240044	Radar System Status	integer	32		
240045	Radio Communication System Status	integer	32		
240046	Default Time For Radio Transmission For Stationary Transmitters	integer	32		
240047	Default Time For Radio Transmission For Moving Transmitters	integer	32		
240048	Body Part Damaged Ratio	real	32		
240049	Name Of The Terrain Database File	character	00		
240050	Name Of Local File	character	00		
240051	Aimpoint Bearing	real	32		
240052	Aimpoint Elevation	real	32		
240053	Aimpoint Range	real	32		
240054	Air Speed	real	32		
240055	Altitude	real	32		
240056	Application Status	structure	32		
240057	Auto Iff	integer	32		
240058	Beacon Delay	real	32		
240059	Bingo Fuel Setting	real	32		

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ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
240060	Cloud Bottom	real	32		
240061	Cloud Top	real	32		
240062	Direction	real	32		
240063	End Action	integer	32		
240064	Frequency	real	32		
240065	Freeze	integer	32		
240066	Heading	real	32		
240067	Identification	integer	32		
240068	Initial Point Data	integer	32		
240069	Latitude	real	64		
240070	Lights	integer	32		
240071	Linear	integer	32		
240072	Longitude	real	64		
240073	Low Altitude	real	32		
240074	Mfd Formats	integer	32		
240075	Nctr	integer	32		
240076	Number Projectiles	integer	32		
240077	Operation Code	integer	32		
240078	Pitch	real	32		
240079	Profiles	integer	32		
240080	Quantity	integer	32		
240081	Radar Modes	integer	32		
240082	Radar Search Volume	real	32		
240083	Roll	real	32		
240084	Rotation	real	32		
240085	Scale Factor X	real	32		
240086	Scale Factor Y	real	32		
240087	Shields	integer	32		
240088	Steerpoint	structure	192		
240089	Spare1	real	64		
240090	Spare2	real	64		
240091	Team	integer	32		
240092	Text	character	00		
240093	Time Of Day	integer	32		
240094	Trail Flag	integer	32		
240095	Trail Size	real	32		
240096	Type Of Projectile	integer	32		
240097	Type Of Target	integer	32		
240098	Type Of Threat	integer	32		
240099	Uhf Frequency	real	32		
240100	Utm Altitude	real	32		
240101	Utm Latitude	real	64		
240102	Utm Longitude	real	64		
240103	Vhf Frequency	real	32		
240104	Visibility Range	real	32		
240105	Void Aaa Hit	integer	32		
240106	Void Collision	integer	32		
240107	Void Earth Hit	integer	32		
240108	Void Friendly	integer	32		
240109	Void Gun Hit	integer	32		
240110	Void Rocket Hit	integer	32		
240111	Void Sam Hit	integer	32		

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ID	Name	Type	Length (bits)	Units	Limits/Ranges/Ref
240112	Weapon Data	integer	32		
240113	Weapon Type	integer	32		
240114	Weather	integer	32		
240115	Wind Direction	real	32		
240116	Wind Speed	real	32		
240117	Wing Station	integer	32		
240118	Yaw	real	32		
240119	Memory Offset	integer	32		
240120	Memory Data	integer	00		
240121	VASI	integer	32		
240122	Beacon	integer	32		
240123	Strobe	integer	32		
240124	Culture	integer	32		
240125	Approach	integer	32		
240126	Runway End	integer	32		
240127	Obstruction	integer	32		
240128	Runway Edge	integer	32		
240129	Ramp Taxiway	integer	32		
240130	Laser Bomb Code	integer	32		
240131	Rack Type	integer	32		
240132	HUD	structure	00		
240133	RoleFileName	character	00		
240134	PilotName	character	00		
240135	PilotDesignation	integer	32		
240136	Model Type	integer	32		
240137	DIS Type	integer	64		
240138	Class	integer	32		
240139	Channel	integer	32		
240140	Entity Type	structure	64		
240141	Alternative Entity Type	structure	64		
240142	Entity Location	structure	192		
240143	Entity Linear Velocity	structure	96		
240144	Entity Orientation	structure	96		
240145	Dead Reckoning	structure	320		
240146	Failure Symptom	integer	32		1=LimitSpeed 2 =LimitGLoad 3=Both
240147	Max Fuel	real	32		
240148	Refueling Boom Connect	integer	32		
240149	Altitude AGL	real	32		
240150	Calibrated Airspeed	real	32		
240151	TACAN Channel	integer	32		
240152	TACAN Band	integer	32		0 = x 1 = y
240153	TACAN Mode	integer	32		0 = off 1 = rec 2 = t/r 3 = aa rec 4 = aa t/r

7.2 Stop/Freeze PDU

7.2.1 Reason

This section specifies the 8-bit enumeration for the Reason field in the Stop/Freeze PDU.

<u>Field Value</u>	<u>Reason to Stop</u>
0	Other
1	Recess
2	Termination
3	System Failure
4	Security Violation
5	Entity Reconstitution
6	Stop for reset
7	Stop for restart
8	Abort Training Return to Tactical Operations

7.2.2 Frozen Behavior

This section specifies the 8-bit Boolean array of the Frozen-Behavior field in the Stop/Freeze PDU. Any individual bit set to one indicates that the simulation application is to continue the corresponding activity in the frozen state; a bit set to zero indicates that the activity is to cease in the frozen state.

<u>Bit</u>	<u>Name</u>	<u>Activity</u>
0	Simulation clock	Run internal simulation clock.
1	Transmit PDUs	Transmit PDUs.
2	Receive PDUs	Update simulation models of other entities via received PDUs.

7.3 Acknowledge PDU

7.3.1 Acknowledge Flag

This section specifies the 16-bit enumeration for the Acknowledge-Flag field in the Acknowledge PDU.

<u>Field Value</u>	<u>Acknowledgment Flags</u>
1	Create Entity
2	Remove Entity
3	Start/Resume
4	Stop/Freeze

7.3.2 Response Flag

This field specifies the 16-bit enumeration for the Response Flag field in the Acknowledge PDU.

<u>Field Value</u>	<u>Response Flag</u>
0	Other
1	Able to comply
2	Unable to comply

7.4 Action Request PDU

This section specifies the 32-bit enumeration for the Action-ID field in the Action-Request PDU.

<u>Field Value</u>	<u>Action ID</u>
0	Other
1	Local storage of the requested information
2	Inform SM of event "ran out of ammunition"
3	Inform SM of event "killed in action"
4	Inform SM of event "damage"
5	Inform SM of event "mobility disabled"
6	Inform SM of event "fire disabled"
7	Inform SM of event "ran out of fuel"
8	Recall checkpoint data
9	Recall initial parameters
10	Initiate tether-lead
11	Initiate tether-follow
12	Unthether
13	Initiate service station resupply
14	Initiate tailgate resupply
15	Initiate hitch lead
16	Initiate hitch follow
17	Unhitch
18	Mount
19	Dismount
20	Start DRC (Daily Readiness Check)
21	Stop DRC
22	Data Query
23	Status Request
24	Send Object State Data
25	Reconstitute
26	Lock Site Configuration
27	Unlock Site Configuration
28	Update Site Configuration
29	Query Site Configuration
30	Tethering Information
31	Mount Intent
33	Accept Subscription
34	Unsubscribe
35	Teleport entity
36	Change aggregate state
37	Request Start PDU

38	Wakeup get ready for initialization
39	Initialize internal parameters
40	Send plan data
41	Synchronize internal clocks
42	Run
43	Save internal parameters
44	Simulate malfunction
45	Join exercise
46	Resign exercise
47	Time advance
100	TACCSF LOS Request-Type 1
101	TACCSF LOS Request-Type 2

7.5 Action Response PDU

This section specifies the 32-bit enumeration for the Request-Status field in the Action-Response PDU.

<u>Field Value</u>	<u>Request Status</u>
0	Other
1	Pending
2	Executing
3	Partially Complete
4	Complete
5	Request rejected
6	Retransmit request now
7	Retransmit request later
8	Invalid time parameters
9	Simulation time exceeded
10	Request done
100	TACCSF LOS Reply-Type 1
101	TACCSF LOS Reply-Type 2
201	Join Exercise Request Rejected

7.6 Event Report PDU

This section specifies the 32-bit enumeration for the Event-Type field in the Event-Report PDU.

<u>Field Value</u>	<u>Event Type</u>
0	Other
1	unused
2	Ran out of ammunition
3	Killed in action
4	Damage
5	Mobility disabled
6	Fire disabled
7	Ran out of fuel
8	Entity initialization
9	Request for indirect fire or CAS mission
10	Indirect fire or CAS fire
11	Minefield entry

12	Minefield detonation
13	Vehicle master power on
14	Vehicle master power off
15	Aggregate state change requested

7.7 Simulation Management w/Reliability family

The enumerations in this section are specific to the Simulation Management w/Reliability protocol.

7.7.1 Required Reliability Service

This field specifies the 8-bit enumeration for the Required Reliability Service field in the Create Entity-R, Remove Entity-R, Start/Resume-R, Stop/Freeze-R, Action Request-R, Data Query-R, Set Data-R, Data-R, Record Query-R, Set Record-R, and Record-R PDUs.

<u>Field Value</u>	<u>Required Reliability Service</u>
0	Acknowledged
1	Unacknowledged

8.0 Distributed Emission Regeneration family

8.1 Electromagnetic Emission PDU

8.1.1 Emitter Name

This section specifies the 16-bit enumeration for the Emitter-Name field in the Emitter System record of the Electromagnetic Emission PDU. The number space is divided into three segments electromagnetic emitters, acoustic emitters, and other emitter.

8.1.1.1 Electromagnetic emitters

<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
45	1226 DECCA MIL		
80	9GR400		
90	9GR600		
135	9LV 200 TA		
180	9LV 200 TV		
225		A310Z	
270		A325A	
315		A346Z	
360		A353B	
405		A372A	
450		A372B	
495		A372C	
540		A377A	
585		A377B	
630		A380Z	
675		A381Z	
720		A398Z	
765		A403Z	
810		A409A	
855		A418A	
900		A419Z	
945		A429Z	
990		A432Z	
1035		A434Z	
1080		A401A	
1125	AGRION 15		
1170	AI MK 23		
1215	AIDA II		
1260	Albatros MK2		
1305	ANA SPS 502		
1350	ANRITSU Electric AR-30A		
1395	Antilope V		
1440	AN/ALQ 99		
1485	AN/ALQ-100		
1530	AN/ALQ-101		
1575	AN/ALQ-119		
1620	AN/ALQ-126A		
1665	AN/APD 10		
1710	AN/APG 53		
1755	AN/APG 59		

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
1800	AN/APG-63AB		
1805	AN/APG-63C		
1845	AN/APG 65		
1870	AN/APG-66		
1890	AN/APG 68		
1935	AN/APG 70		
1945	AN/APG-73		
1960	AN/APG-77		
1980	AN/APG-502		
2025	AN/APN-1		
2070	AN/APN-22		
2115	AN/APN 59		
2160	AN/APN-69		
2205	AN/APN-81		
2250	AN/APN-117		
2295	AN/APN-118		
2340	AN/APN-130		
2385	AN/APN-131		
2430	AN/APN-133		
2475	AN/APN-134		
2520	AN/APN-147		
2565	AN/APN-150		
2610	AN/APN-153		
2655	AN/APN 154		
2700	AN/APN-155		
2745	AN/APN-159		
2790	AN/APN-182		
2835	AN/APN-187		
2880	AN/APN-190		
2925	AN/APN 194		
2970	AN/APN-195		
3015	AN/APN-198		
3060	AN/APN-200		
3105	AN/APN 202		
3150	AN/APN-217		
3195	AN/APN-506		
3240	AN/APQ-72		
3285	AN/APQ-99		
3330	AN/APQ 100		
3375	AN/APQ-102		
3420	AN/APQ-109		
3465	AN/APQ 113		
3510	AN/APQ 120		
3555	AN/APQ 126		
3600	AN/APQ-128		
3645	AN/APQ-129		
3690	AN/APQ 148		
3735	AN/APQ-153		
3780	AN/APQ 159		
3820	AN/APS-31		
3825	AN/APS-42		
3870	AN/APS 80		
3915	AN/APS-88		

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
3960	AN/APS 115		
4005	AN/APS 116		
4050	AN/APS-120		
4095	AN/APS 121		
4140	AN/APS 124		
4185	AN/APS 125		
4230	AN/APS-128		
4275	AN/APS 130		
4320	AN/APS 133		
4365	AN/APS-134		
4410	AN/APS 137		
4455	AN/APS-138		
4500	AN/APW 22		
4545	AN/APW 23		
4590	AN/APX-6		
4635	AN/APX 7		
4680	AN/APX 39		
4725	AN/APX-72		
4770	AN/APX 76		
4815	AN/APX 78		
4860	AN/APX 101		
4905	AN/APY 2		
4950	AN/APY 3		
4995	AN/ARN 21		
5040	AN/ARN 52		
5085	AN/ARN 84		
5130	AN/ARN 118		
5175	AN/ARW 73		
5220	AN/ASB 1		
5265	AN/ASG 21		
5280	AN/ASQ-108		
5310	AN/AWG 9		
5355	AN/BPS-9		
5400	AN/BPS 15		
5445	AN/DSQ 26 Phoenix MH		
5490	AN/DSQ 28 Harpoon MH		
5495	AN/FPN-40		
5500	AN/FPN-62		
5505	AN/FPS-16		
5510	AN/FPS-117		
5515	AN/FPS-20R		
5520	AN/FPS-77		
5525	AN/FPS-103		
5530	AN/GPX-6		
5535	AN/GPX 8		
5540	AN/MPQ-10		
5545	AN/MPQ-46 (HPI) ILL		
5550	AN/MPQ-48/55 CWAR		
5555	AN/MPQ-50 (PAR) TA		
5560	AN/MPQ-51 (ROR) TT		
5570	AN/MPQ-53		
5575	AN/MPQ-64		
5580	AN/SPG-34		

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
5625	AN/SPG 50		
5670	AN/SPG 51		
5715	AN/SPG-51 CWI TI		
5760	AN/SPG-51 FC		
5805	AN/SPG 52		
5850	AN/SPG-53		
5895	AN/SPG 55B		
5940	AN/SPG 60		
5985	AN/SPG 62		
6030	AN/SPN 35		
6075	AN/SPN 43		
6120	AN/SPQ-2		
6165	AN/SPQ 9		
6210	AN/SPS-4		
6255	AN/SPS-5		
6300	AN/SPS-5C		
6345	AN/SPS-6		
6390	AN/SPS 10		
6435	AN/SPS 21		
6480	AN/SPS-28		
6525	AN/SPS-37		
6570	AN/SPS-39A		
6615	AN/SPS 40		
6660	AN/SPS-41		
6705	AN/SPS 48		
6750	AN/SPS-48C		
6795	AN/SPS 49		
6840	AN/SPS 52		
6885	AN/SPS 53		
6930	AN/SPS 55		
6975	AN/SPS-55 SS		
7020	AN/SPS-58		
7065	AN/SPS 59		
7110	AN/SPS 64		
7155	AN/SPS 65		
7200	AN/SPS 67		
7245	AN/SPY 1		
7250	AN/SPY-1A		
7270	AN/TPN-17		
7275	AN/TPN-24		
7280	AN/TPQ-18		
7295	AN/TPQ-36		
7300	AN/TPQ-37		
7305	AN/TPS-43		
7310	AN/TPS-43E		
7315	AN/TPS-59		
7320	AN/TPS-63		
7325	AN/TPS-75		
7335	AN/ULQ-6A		
7380	AN/UPN 25		
7425	AN/UPS 1		
7470	AN/UPX 1		
7515	AN/UPX 5		

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
7560	AN/UPX 11		
7605	AN/UPX 12		
7650	AN/UPX 17		
7695	AN/UPX 23		
7740	AN/VPS 2		
7785			Apelco AD 7 7
7830	APG 71		
7875	APN 148		
7920	APN 227		
7965	(deleted)		
8010	(deleted)		
8055	(deleted)		
8100	APS 504 V3		
8145	AR M31		
8190	ARI 5954		
8235	ARI 5955		
8280	ARI 5979		
8325			ARINC 564 BNDX/KING RDR 1E
8370			ARINC 700 BNDX/KING RDR 1E
8380	ARSR-3		
8390	ARSR-18		
8415		AS 2 Kipper	
8460		AS 2 Kipper MH	
8505		AS 4 Kitchen	
8550		AS 4 Kitchen MH	
8595		AS 5 Kelt MH	
8640		AS 6 Kingfish MH	
8685		AS 7 Kerry	
8730		AS 7 Kerry MG	
8760	Aspide AAM/SAM ILL		
8775	ASR O		
8780	ASR-5		
8785	ASR-8		
8790	ASR-9		
8820		AT 2 Swatter MG	
8840	ATCR-33		
8845	ATCR 33 K/M		
8865			Atlas Elektronik TRS N
8910	AVG 65		
8955	AVH 7		
9000	AVQ 20		
9045	AVQ30X		
9075	AVQ-50 (RCA)		
9090	AVQ 70		
9135	AWS 5		
9180	AWS 6		
9225		Back Net A B	
9270		Back Trap	
9315		Ball End	
9360		Ball Gun	
9405		Band Stand	

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
9450	P-35/37 ("A"); P-50 ("B")	Bar Lock	
9495		Bass Tilt	
9540		Beacon	
9585		Bean Sticks	
9630		Bee Hind	
9660		Big Bird	
9675		Big Bulge	
9720		Big Bulge A	
9765		Big Bulge B	
9810		Big Mesh	
9855		Big Net	
9885	9S15MT	Bill Board	
9900		Bill Fold	
9930	Blue Fox	Sea Harrier FRS Mk 1/5	
9935	Blue Vixen	Sea Harrier F/A Mk 2	
9945	Blue Silk		
9990	Blue Parrot		
10035	Blue Orchid		
10080		Boat Sail	
10125			Bofors Electronic 9LV 331
10170			Bofors Ericsson Sea Giraffe 50 HC
10215		Bowl Mesh	
10260		Box Brick	
10305		Box Tail	
10350	BPS 11A		
10395	BPS 14		
10440	BPS 15A		
10485	BR-15 Tokyo KEIKI		
10510			BRIDGEMASTE
10530		Bread Bin	
10575	BT 271		
10620	BX 732		
10665		Buzz Stand	
10710	C 5A Multi Mode Radar		
10755	Caiman		
10800		Cake Stand	
10845	Calypso C61		
10890	Calypso Ii		
10935	Castor Ii		
10940	Castor 2J TT (Crotale NG)		
10980		Cat House	
11000		Chair Back TT	
11010		Chair Back ILL	
11025		Cheese Brick	
11070	Clam Pipe		
11115		Clamshell	
11160			Collins WXR-700X
11205			Collins DN 101
11250			Contraves Sea Hunter MK 4
11270	CR-105 RMCA		
11295		Cross Bird	
11340		Cross Dome	

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
11385		Cross Legs	
11430		Cross Out	
11475		Cross Slot	
11520		Cross Sword	
11565		Cross Up	
11610		Cross Sword FC	
11655	Crotale Acquisition TA		THD-5000
11660	Crotale NG TA		Griffon
11665	Crotale TT		
11700	Crotale MG		
11745	CSS C 3C CAS 1M1 M2 MH		
11790	CSS C 2B HY 1A MH		
11835	CWS 2		
11880		Cylinder Head	
11925	Cyrano II		
11970	Cyrano IV		
11975	Cyrano IV-M		
12010	DA-01/00		
12015	DA 05 00		
12060		Dawn	
12105		Dead Duck	
12150			DECCA 45
12195			DECCA 50
12240			DECCA 110
12285			DECCA 170
12330			DECCA 202
12375			DECCA D202
12420			DECCA 303
12465			DECCA 626
12510			DECCA 629
12555			DECCA 914
12600			DECCA 916
12645			DECCA 1226 Commercial
12690			DECCA 1626
12735			DECCA 2459
12780			DECCA AWS 1
12825			DECCA RM 416
12870			DECCA RM 914
12915			DECCA RM 1690
12960			DECCA Super 101 MK 3
13005	DISS 1		
13050	Rapier TT		DN 181
13055	Rapier 2000 TT		BLINDFIRE FSC TT
13095		Dog Ear	
13140		Dog House	
13185	Don 2		
13230		Don A/B/2/Kay	
13275		Donets	
13320		Down Beat	
13365	DRAA 2A		
13410	DRAA 2B		
13455	DRAC 39		
13500	DRBC 30B		

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
13545	DRBC 31A		
13590	DRBC 32A		
13635	DRBC 32D		
13680	DRBC 33A		
13725	DRBI 10		
13770	DRBI 23		
13815	DRBJ 11B		
13860	DRBN 30		
13905	DRBN 32		
13950	DRBR 51		
13995	DRBV 20B		
14040	DRBV 22		
14085	DRBV 26C		
14130	DRBV 30		
14175	DRBV 50		
14220	DRBV 51		
14265	DRBV 51A		
14310	DRBV 51B		
14355	DRBV 51C		
14400	Drop Kick		
14445	DRUA 31		
14490		Drum Tilt	
14535		Drum Tilt A	
14545		Drum Tilt B	
14580		Dumbo	
14600	ECR-90		
14625		Egg Cup A/B	
14670	EKCO 190		
14715	EL M 2001B		
14760	EL M 2207		
14805	ELTA EL/M 2221 GM STGR		
14810	ELTA SIS		
14850	EMD 2900		
14895		End Tray	
14940	Exocet 1		
14985	Exocet 1 MH		
15030	Exocet 2		
15075		Eye Bowl	
15120		Eye Shield	
15165		Fan Song A	
15200		Fan Song B/F TA	
15210		Fan Song B/F TT	
15220		Fan Song C/E TA	
15230		Fan Song C/E TT	
15240		Fan Song C/E MG	
15255		Fan Song B/F MG	
15300		Fan Tail	
15345		Fin Curve	
15390		Fire Can	
15435		Fire Dish	
15470		Fire Dome TA	
15475		Fire Dome TT	
15480		Fire Dome TI	

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
15525		Fire Iron	
15570		Fire Wheel	
15615		Fish Bowl	
15660		Flap Lid	
15705		Flap Truck	
15750		Flap Wheel	
15795		Flash Dance	
15840	P-15	Flat Face A B C D	
15885		Flat Screen	
15930		Flat Spin	
15975		Slat Twin	
16020	Fledermaus		
16065		Fly Screen	
16110		Fly Screen A&B	
16155		Fly Trap B	
16200		Fog Lamp MG	
16245		Fog Lamp TT	
16290		Foil Two	
16335	Fox Hunter		
16380		FOX FIRE	
16390		FOX FIRE ILL	
16420	FR-2000		
16425		Front Dome	
16470		Front Door	
16515		Front Piece	
16560	Furuno		
16605	Furuno 701		
16650	Furuno 711 2		
16695	Furuno 2400		
16740	GA 01 00		
16785		Gage	
16830		Garpin	
16875	GEM BX 132		
16900	GIRAFFE		
16915		Gin Sling TA	
16920		Gin Sling TT	
16925		Gin Sling MG	
16945	GPN-22		
16950	GRN-9		
16965	Green Stain		
17010		Grid Bow	
17025	9S32	GRILL PAN TT	
17055	Guardsman		
17070	RPK-2	GUN DISH (ZSU-23/4)	
17100		Hair Net	
17145		Half Plate A	
17190		Half Plate B	
17220	HARD		
17235		Hawk Screech	
17280		Head Light A	
17325		Head Lights	
17370		Head Lights C	
17415		Head Lights MG A	

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
17460		Head Lights MG B	
17505		Head Lights TT	
17550		Head Net	
17595		Hen Egg	
17640		Hen House	
17685		Hen Nest	
17730		Hen Roost	
17775		High Brick	
17820		High Fix	
17865		High Lark TI	
17910		High Lark 1	
17955		High Lark 2	
18000		High Lark 4	
18045		High Lune	
18090		High Pole A&B	
18135		High Scoop	
18150	9S19MT	HIGH SCREEN	
18180		High Sieve	
18200	HN-503		
18225		Home Talk	
18270		Horn Spoon	
18315		Hot Flash	
18320	IRL144M	Hot Shot TA	
18325	IRL144M	Hot Shot TT	
18330	IRL144M	Hot Shot MG	
18360	IFF MK XII AIMS UPX 29		
18405	IFF MK XV		
18450		Jay Bird	
18460	JRC-NMD-401		
18495	Jupiter		
18540	Jupiter II		
18550	JY-8		
18555	JY-9		
18560	JY-14		
18585	K376Z		
18630			Kelvin Hughes 2A
18675			Kelvin Hughes 14/9
18720			Kelvin Hughes type 1006
18765			Kelvin Hughes type 1007
18785	KH-902M		
18810		Kite Screech	
18855		Kite Screech A	
18900		Kite Screech B	
18945		Kivach	
18990		Knife Rest	
19035	P-10	Knife Rest B	
19080	KSA SRN		
19125	KSA TSR		
19170		Land Fall	
19215		Land Roll MG	
19260		Land Roll TA	
19305		Land Roll TT	
19350		Leningraf	

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
19395		Light Bulb	
19440	LN 55		
19485		Ln 66	
19530		Long Bow	
19575		Long Brick	
19620		Long Bull	
19665		Long Eye	
19710		Long Head	
19755		Long Talk	
19800		Long Track	
19845		Long Trough	
19890		Look Two	
19935	LORAN		
19950		Low Blow TA	
19955		Low Blow TT	
19960		Low Blow MG	
19980		Low Sieve	
20025		Low Trough	
20040	TRS-2050		LP-23
20070	LW 08		
20115	M22-40		
20160	M44		
20205	M401Z		
20250	M585Z		
20295	M588Z		
20340	MA 1 IFF Portion		
20385			MA Type 909#
20430			Marconi 1810
20475			Marconi Canada HC 75
20520			Marconi S 1802
20530			Marconi S 247
20565			Marconi S 810
20610			Marconi type 967
20655			Marconi type 968
20700			Marconi type 992
20745			Marconi/signaal type 1022
20790			Marconi/signaal type 910
20835			Marconi/signaal type 911
20880			Marconi/signaal type 992R
20925		Mesh Brick	
20950	Mirage ILL		
20970			MK 15 CIWS
21015	MK-23		
21060	MK 23 TAS		
21105	MK 25		
21150	MK-35 M2		
21195	MK 92		
21240	MK-92 CAS		
21285	MK-92 STIR		
21330	MK 95		
21340	MLA-1		
21375	MM APS 705		
21420	MM SPG 74		

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
21465	MM SPG 75		
21510	MM SPS 702		
21555	MM SPS 768		
21600	MM SPS 774		
21645	Moon 4		
21690	MPDR 18 X		
21710	MT-305X		
21735		Muff Cob	
21780	Mushroom		
21825	Mushroom 1		
21870	Mushroom 2		
21890		Nanjing B	
21895		Nanjing C	
21915	Nayada		
21960	Neptun		
21980		NIKE TT	
22005	NRBA 50		
22050	NRBA 51		
22095	NRBF 20A		
22140		Nysa B	
22185		O524A	
22230		O580B	
22275		O625Z	
22320		O626Z	
22345		Odd Group	
22365		Odd Lot	
22410		Odd Pair	
22455		Oka	
22500	OKEAN		
22545	OKINXE 12C		
22590	OMEGA		
22635	Omera ORB32		
22680		One Eye	
22725	OPS-16B		
22770		OR-2	
22815	ORB 32		
22860	Orion Rtn 10X		
22905	Otomat MK II Teseo		
22950		Owl Screech	
22960	PA-1660		
22995		Palm Frond	
23040		Palm Frond AB	
23085		Pat Hand TT	
23095		Pat Hand MG	
23130		Patty Cake	
23175		Pawn Cake	
23220	PBR 4 Rubin		
23265		Pea Sticks	
23310		Peel Cone	
23355		Peel Group	
23400		Peel Group A	
23445		Peel Group B	
23490		Peel Pair	

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
23535			Philips 9LV 200
23580			Philips 9LV 331
23625			Philips LV 223
23670			Philips Sea Giraffe 50 HC
23690		Pin Jib	
23715		Plank Shave	
23760		Plank Shave A	
23805		Plank Shave B	
23850		Plate Steer	
23895			Plessey AWS 1
23940			Plessey AWS 4
23985			Plessey AWS 6
23990			Plessey RJ
24030			Plessey type 996
24075		Plinth Net	
24095		Pluto	
24100	POHJANPALO		
24120	POLLUX		
24165		Pop Group	
24210		Pop Group MG	
24255		Pop Group TA	
24300		Pop Group TT	
24345		Pork Trough	
24390		Post Bow	
24435		Post Lamp	
24480		Pot Drum	
24525		Pot Head	
24570	PRIMUS 40 WXD		
24615	PRIMUS 300SL		
24650	PS-05A		
24660	PS 46 A		
24705	PS 70 R		
24710	PS-890		
24750		Puff Ball	
24795			Racal 1229
24840			Racal AC 2690 BT
24885			Racal Decca 1216
24930			Racal Decca 360
24975			Racal Decca AC 1290
25020			Racal Decca TM 1229
25065			Racal Decca TM 1626
25110			Racal DRBN 34A
25155			Radar 24
25200	RAN 7S		
25245	RAN 11 LX		
25260	Rapier TA		
25265	Rapier 2000 TA		Dagger
25270	Rapier MG		
25280	RAT-31S		
25285	RATAC (LCT)		
25290			Raytheon 1220
25335			Raytheon 1500
25380			Raytheon 1645

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
25425			Raytheon 1650
25470			Raytheon 1900
25515			Raytheon 2502
25560			Raytheon TM 1650/6X
25605			Raytheon TM 1660/12S
25630	RAY-1220XR		
25650			Ray 2900
25695			Raypath
25735	RBE2		
25740	RDM		
25760	RDY		
25785	RDN 72		
25830	RDR 1A		
25875	RDR 1200		
25920		Rice Lamp	
25965		Rice Pad	
26010		Rice Screen	
26055	ROLAND BN		
26100	ROLAND MG		
26145	ROLAND TA		
26190	ROLAND TT		
26235		Round Ball	
26280		Round House	
26325		Round House B	
26350	RTN-1A		
26370	RV2		
26415	RV3		
26460	RV5		
26505	RV10		
26550	RV17		
26595	RV18		
26610	RV-377		
26640	RV UM		
26685		SA 2 Guideline	
26730		SA 3 Goa	
26775		SA 8 Gecko DT	
26795		SA-12 TELAR ILL	
26820		SA N 7 Gadfly TI	
26865		SA N 11 Cads 1 UN	
26910		Salt Pot A&B	
26955	SATURNE II		
27000		Scan Can	
27045		Scan Fix	
27090		Scan Odd	
27135		Scan Three	
27180		Scoup Plate	
27190	SCR-584		
27225	Sea Archer 2		
27270	Sea Hunter 4 MG		
27315	Sea Hunter 4 TA		
27360	Sea Hunter 4 TT		
27405		Sea Gull	
27450		Sea Net	

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
27495	Sea Spray		
27540	Sea Tiger		
27585			Selenia Orion 7
27630			Selenia type 912
27675			Selennia RAN 12 L/X
27720			Selennia RTN 10X
27765			Selinia ARP 1645
27810	SGR 102 00		
27855	SGR 103/02		
27870	SGR-104		
27900		Sheet Bend	
27945		Sheet Curve	
27990		Ship Globe	
28035		Ship Wheel	
28080	SGR 114		
28125		Shore Walk A	
28170		Short Horn	
28215		Shot Dome	
28260		Side Globe JN	
28280	PRV-11	Side Net	
28305		Side Walk A	
28350			Signaal DA 02
28395			Signaal DA 05
28440			Signaal DA 08
28485			Signaal LW 08
28530			Signaal LWOR
28575			Signaal M45
28620			Signaal MW 08
28665			Signaal SMART
28710			Signaal STING
28755			Signaal STIR
28800			Signaal WM 20/2
28845			Signaal WM 25
28890			Signaal WM 27
28935			Signaal WM 28
28980			Signaal ZW 01
29025			Signaal ZW 06
29070		Ski Pole	
29115		Skin Head	
29160		Skip Spin	
29185	SKYGUARD TA		UAR-1021
29190	SKYGUARD TT		UAR-1021
29205		Sky Watch	
29250	SL		
29270	SL/ALQ-234		
29295		Slap Shot E	
29340		Slim Net	
29385		Slot Back A	
29400		Slot Back ILL	
29430		Slot Back B	
29475			SMA 3 RM
29520			SMA 3 RM 20
29565			SMA 3RM 20A/SMG

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<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
29610			SMA BPS 704
29655			SMA SPIN 749 (V) 2
29700			SMA SPN 703
29745			SMA SPN 751
29790			SMA SPOS 748
29835			SMA SPQ 2
29880			SMA SPQ 2D
29925			SMA SPQ 701
29970			SMA SPS 702 UPX
30015			SMA ST 2 OTOMAT II MH
30060			SMA 718 Beacon
30105		Snoop Drift	
30150		Snoop Head	
30195		Snoop Pair	
30240		Snoop Plate	
30285		Snoop Slab	
30330		Snoop Tray	
30375		Snoop Tray 1	
30420		Snoop Tray 2	
30465		Snoop Watch	
30470	9S18M1	Snow Drift	
30510	SO-1		
30555	SO A Communist		
30600		Sock Eye	
30645	SOM 64		
30670		SPADA TT	
30690	Sparrow (AIM/RIM-7) ILL		
30735	SPG 53F		
30780	SPG 70 (RTN 10X)		
30825	SPG 74 (RTN 20X)		
30870	SPG 75 (RTN 30X)		
30915	SPG 76 (RTN 30X)		
30960		Spin Scan A	
31005		Spin Scan B	
31050		Spin Trough	
31095		Splash Drop	
31140	SPN 35A		
31185	SPN 41		
31230	SPN 42		
31275	SPN 43A		
31320	SPN 43B		
31365	SPN 44		
31410	SPN 46		
31455	SPN 703		
31500	SPN 728 (V) 1		
31545	SPN 748		
31590	SPN 750		
31635		Sponge Cake	
31680	P-12	Spoon Rest	
31725	SPQ 712 (RAN 12 L/X)		
31770	SPS 6C		
31815	SPS 10F		
31860	SPS 12		

Section 8
Distributed Emission Regeneration family

<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
31905	(deleted)		
31950	(deleted)		
31995	SPS 768 (RAN EL)		
32040	SPS 774 (RAN 10S)		
32085	SPY 790		
32130		Square Head	
32175		Square Pair	
32220		Square Slot	
32265		Square Tie	
32310		Squash Dome	
32330	P-15M	Squat Eye	
32355		Squint Eye	
32400	SRN 6		
32445	SRN 15		
32490	SRN 745		
32535	SRO 1		
32580	SRO 2		
32625		SS C 2B Samlet MG	
32670		SS N 2A B CSSC	
32715		SS N 2A B CSSC 2A 3A2	
		MH	
32760		SS N 2C Seeker	
32805		SS N 2C D Styx	
32850		SS N 2C D Styx C D MH	
32895		SS N 3 SSC SS C 18 BN	
32940		SS N 3B Sepal AL	
32985		SS N 3B Sepal MH	
33030		SS N 9 Siren	
33075		SS N 9 Siren AL	
33120		SS N 9 Siren MH	
33165		SS N 12 Sandbox AL	
33210		SS N 12 Sandbox MH	
33255		SS N 19 Shipwreck	
33300		SS N 19 Shipwreck AL	
33345		SS N 19 Shipwreck MH	
33390		SS N 21 AL	
33435		SS N 22 Sunburn	
33480		SS N 22 Sunburn MH	
33525		Stone Cake	
33570	STR 41		
33590		Straight Flush TA	
33595		Straight Flush TT	
33600		Straight Flush ILL	
33615		Strike Out	
33660		Strut Curve	
33705		Strut Pair	
33750		Strut Pair 1	
33795		Strut Pair 2	
33840		Sun Visor	
33860	Superfledermaus		
33885		Swift Rod 1	
33930		Swift Rod 2	
33975	T1166		

Section 8
Distributed Emission Regeneration family

<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
34020	T1171		
34065	T6004		
34110	T6031		
34155	T8067		
34200	T8068		
34245	T8124		
34290	T8408		
34335	T8911		
34380	T8937		
34425	T8944		
34470	T8987		
34515	P-14	Tall King	
34560		Tall Mike	
34605		Tall Path	
34625		Team Work	
34640	THAAD GBR		
34650	THD 225		
34670	THD 1940		Picador
34695	THD 5500		
34740		Thin Path	
34785	PRV-9	Thin Skin	
34795			Thompson CSF AT-10
34830			Thompson CSF TH D 1040
			Neptune
34875			Thompson CSF Calypso
34920			Thompson CSF CASTOR
34965			Thompson CSF Castor II
35010			Thompson CSF DRBC 32A
35055			Thompson CSF DRBJ 11
			D/E
35100			Thompson CSF DRBV 15A
35145			Thompson CSF DRBV 15C
35190			Thompson CSF DRBV 22D
35235			Thompson CSF DRBV 23B
35280			Thompson CSF DRUA 33
35325			Thompson CSF Mars DRBV
			21A
35370			Thompson CSF Sea Tiger
35415			Thompson CSF Triton
35460			Thompson CSF Vega with
			DRBC 32E
35480	TRS-2105		TIGER-G
35490	TRS-2100		TIGER-S
35505		Tie Rods	
35550	36D6	Tin Shield	
35570		Tin Trap	
35580	TIRSPONDER		
35595		Toad Stool 1	
35640		Toad Stool 2	
35685		Toad Stool 3	
35730		Toad Stool 4	
35775		Toad Stool 5	
35800		Tomb Stone	

Section 8
Distributed Emission Regeneration family

<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
35820		Top Bow	
35865		Top Dome	
35910		Top Knot	
35955		Top Mesh	
36000		Top Pair	
36045		Top Plate	
36090		Top Sail	
36135		Top Steer	
36180		Top Trough	
36220		Scrum Half TA	
36225		Scrum Half TT	Tor
36230		Scrum Half MG	
36270		Track Dish	
36315	TORSO M		
36360		Trap Door	
36380	TRISPONDE		
36405	TRS 3033		
36450	TRS-N		
36495	TSE 5000		
36540	TSR 333		
36585		Tube Arm	
36630		Twin Eyes	
36675		Twin Pill	
36720		Twin Scan	
36765		Twin Scan Ro	
36810		Two Spot	
36855	TYPE 262		
36900	TYPE 275		
36945	TYPE 293		
36990	TYPE 343 SUN VISOR B		
37035	TYPE 347B		
37080	Type 756		
37125	TYPE 903		
37170	TYPE 909 TI		
37215	TYPE 909 TT		
37260	TYPE 910		
37305	TYPE 965		
37350	TYPE 967		
37395	TYPE 968		
37440	TYPE 974		
37485	TYPE 975		
37530	TYPE 978		
37575	TYPE 992		
37620	TYPE 993		
37665	TYPE 994		
37710	TYPE 1006(1)		
37755	TYPE 1006(2)		
37800	TYPE 1022		
37845	UK MK 10		
37890	UPX 1 10		
37935	UPX 27		
37980	URN 20		
38025	URN 25		

<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
38045	VOLEX III/IV		
38070	W8818		
38115	W8838		
38160	WAS-74S		
38205		Wasp Head	
38250		Watch Guard	
38295			Western Electric MK 10
38340			Westinghouse Electric SPG 50
38385			Westinghouse Electric W 120
38430			Westinghouse SPS 29C
38475			Westinghouse SPS 37
38520	Wet Eye		
38565	Wet Eye Mod		
38610		Whiff	
38655		Whiff Brick	
38700		Whiff Fire	
38745	Wild Card		
38790		Witch Eight	
38835		Witch Five	
38880	WM2X Series		
38925	WM2X Series CAS		
38950	WSR-74C		
38955	WSR-74S		
38970		Wood Gage	
39015	Yard Rake		
39060		Yew Loop	
39105		Yo-Yo	
39150	ZW 06		

8.1.1.2 Acoustic emitters

<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
40020			

8.1.1.3 Other emitters

<u>Field Value</u>	<u>National Nomenclature</u>	<u>NATO Reporting Name</u>	<u>Commercial Designation</u>
62020			

8.1.2 Function

This section specifies the 8-bit enumeration for the Function field in the Emitter-System record of the Electromagnetic Emission PDU.

<u>Field Value</u>	<u>Emission Function</u>
0	Other
1	Multi-function

2	Early Warning/Surveillance
3	Height Finding
4	Fire Control
5	Acquisition/Detection
6	Tracking
7	Guidance/Illumination
8	Firing point/launch point location
9	Ranging
10	Radar Altimeter
11	Imaging
12	Motion Detection
13	Navigation
14	Weather
15	Instrumentation
16	Identification/Classification
17	AAA (Anti-Aircraft Artillery) Fire Control
18	Air Search/Bomb
19	Air Intercept
20	Altimeter
21	Air Mapping
22	Air Traffic Control
23	Beacon
24	Battlefield Surveillance
25	Ground Control Approach
26	Ground Control Intercept
27	Coastal Surveillance
28	Decoy/Mimic
29	Data Transmission
30	Earth Surveillance
31	Gun Lay Beacon
32	Ground Mapping
33	Harbor Surveillance
34	IFF (Identify Friend or Foe)
35	ILS (Instrument Landing System)
36	Ionospheric Sound
37	Interrogator
38	Barrage Jamming
39	Click Jamming
40	Deceptive Jamming
41	Frequency Swept Jamming
42	Jamming
43	Noise Jamming
44	Pulsed Jamming
45	Repeater Jamming
46	Spot Noise Jamming
47	Missile Acquisition
48	Missile Downlink
49	Meteorological
50	Space
51	Surface Search
52	Shell Tracking
56	Television
57	Unknown
58	Video Remoting

59	Experimental or Training
60	Missile Guidance
61	Missile Homing
62	Missile Tracking
64	Jamming, noise
65	Jamming, deception
66	Decoy
71	Navigation/Distance Measuring Equipment
72	Terrain Following
73	Weather Avoidance
74	Proximity Fuse
75	Instrumentation
76	Radiosonde
77	Sonobuoy
96	Weapon, non-lethal
97	Weapon, lethal

8.1.3 State Update Indicator

This section specifies the 8-bit enumeration for the State Update Indicator field in the Electromagnetic Emission PDU.

<u>Field Value</u>	<u>State Update Indicator</u>
0	State Update
1	Changed Data Update

8.1.4 Beam Function

This section specifies the 8-bit enumeration for the Beam Function field in the Electromagnetic Emission PDU.

<u>Field Value</u>	<u>Beam Function</u>
0	Other
1	Search
2	Height finder
3	Acquisition
4	Tracking
5	Acquisition and tracking
6	Command guidance
7	Illumination
8	Range only radar
9	Missile beacon
10	Missile fuze
11	Active radar missile seeker
12	Jammer
13	IFF
14	Navigational / Weather
15	Meteorological
16	Data transmission
17	Navigational directional beacon

8.1.5 High Density Track/Jam

This section specifies the 8-bit enumeration for the High Density Track/Jam field in the Electromagnetic Emission PDU.

<u>Field Value</u>	<u>High Density Track/Jam</u>
0	Not Selected
1	Selected

8.2 Designator PDU

8.2.1 Code Name

This section specifies the 16-bit enumeration for the Code-Name field in the Designator PDU.

<u>Field Value</u>	<u>Designator Code Name</u>
0	Other
1	TBD

8.2.2 Designator Code

This section specifies the 8-bit enumeration for the Designator-Code field in the Designator PDU.

<u>Field Value</u>	<u>Designator Code</u>
0	Other
1	TBD

8.3 IFF/ATC/NAVAIDS PDU

The enumerations for the IFF/ATC/NAVAIDS PDU are listed by system type. There are currently no enumerations for System Type = 0 (Other) or for NAVAIIDS. Field values in *italics* represent all the other values for a field, in addition to those that apply to the specific system type listed. They are included for some of the fields to facilitate comprehension.

For IFF Mode 1, 2, and 3 code elements, the IFF code is placed in the code elements reading right to left. For example a Mode 2 code of 2376 would be placed in the Parameter 2 code elements as follows: Code element 1 = 6, Code element 2 = 7, Code element 3 = 3 and Code element 4 = 2. The entire 16-bit Code/Status field is then passed as an unsigned integer.

8.3.1 System Type 1 (Mark X/XII/ATCRBS/MODE S Transponder)

8.3.1.1 System ID

8.3.1.1.1 Change/Options

This section specifies the 8-bit Boolean array for the Change/Options field in the System ID record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Change Indicator	0 = No change since last report 1 = Initial report or change since last report.
1	Alternate Mode 4	0 = No 1 = Yes
2	Alternate Mode 5/C	0 = No 1 = Yes
3-7	Not used	

8.3.1.1.2 System Type

This section specifies the 16-bit enumeration for the System Type field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Type</u>
0	<i>Other</i>
1	Mark X/XII/ATCRBS/Mode S Transponder
2	Mark X/XII/ATCRBS/Mode S Interrogator
3	<i>Soviet Transponder</i>
4	<i>Soviet Interrogator</i>
5	RRB Transponder

8.3.1.1.3 System Name

This section specifies the 16-bit enumeration for the System Name field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Name</u>
0	<i>Other</i>

1	Mark X
2	Mark XII
3	ATCRBS
4	<i>Soviet</i>
5	Mode S
6	Mark X/XII/ATCRBS
7	Mark X/XII/ATCRBS/Mode S
8	ARI 5954
9	ARI 5983
10+	Not used

8.3.1.1.4 System Mode

This section specifies the 8-bit enumeration for the System Mode field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Mode</u>
0	Other

8.3.1.2 Fundamental Operational Data

8.3.1.2.1 System Status

This section specifies the 8-bit Boolean array for the System Status field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	System On/Off	0 = Off 1 = On
1	Parameter 1	0 = Capable 1 = Not capable
2	Parameter 2	0 = Capable 1 = Not capable
3	Parameter 3	0 = Capable 1 = Not capable
4	Parameter 4	0 = Capable 1 = Not capable
5	Parameter 5	0 = Capable 1 = Not capable
6	Parameter 6	0 = Capable 1 = Not capable
7	Operational Status	0 = Operational 1 = System failed

8.3.1.2.2 Parameter 1 - Mode 1 Code/Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-2	Code element 1	0-3 octal
3-5	Code element 2	0-7 octal
6-11	Not used	0

12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.1.2.3 Parameter 2 - Mode 2 Code/Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-2	Code element 1	0-7 octal
3-5	Code element 2	0-7 octal
6-8	Code element 3	0-7 octal
9-11	Code element 4	0-7 octal
12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.1.2.4 Parameter 3 - Mode 3/A Code/Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-2	Code element 1	0-7 octal
3-5	Code element 2	0-7 octal
6-8	Code element 3	0-7 octal
9-11	Code element 4	0-7 octal
12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.1.2.5 Parameter 4 - Mode 4 Code/Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-11	Code element 1	0-4094 = "Pseudo-Crypto" value 4095= No Pseudo-Crypto value. Use Alternate Mode 4 value
12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.1.2.6 Parameter 5 - Mode 5/C Code/Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Negative Altitude	0 = Positive altitude above mean sea level Indicator if Mode 5/C altitude is contained in Bits 1-11 1 = Negative altitude below mean sea level Indicator if Mode 5/C altitude is contained in Bits 1-11
1-11	Mode 5/C altitude	1 = Alternate Mode 5 (if altitude Bits 1-11 = 2047) 0-1260 = Actual Mode 5/C altitude in the range 0-126,000 feet in 100-foot increments (Bit 0 - Negative / Positive Indicator must be set appropriately) 2047= Not actual Mode 5/C altitude value. Use alternate Mode 5 (Bits 0-11 = 4095 i.e. all 1-s)
12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.1.2.7 Parameter 6 - Mode S Code/Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-11	To be defined.	
12	TCAS	0 = TCAS I 1 = TCAS II
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.1.2.8 Modifier

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Other	0
1	Emergency	0 = Off 1 = On
2	Ident/Squawk Flash	0 = Off 1 = On
3	STI	0 = Off 1 = On
4-7	Not used	

8.3.1.2.9 Alternate Parameter 4

<u>Field Value</u>	<u>Alternate Parameter 4</u>
0	Other
1	Valid
2	Invalid
3	No Response
4+	Not used

8.3.1.2.10 Information Layers

This section specifies the 8-bit Boolean array for the Information Layer Field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Not used	0
1	Layer 1	0 = Not Present 1 = Present
2	Layer 2	0 = Not Present 1 = Present
3-7	Not used	0

8.3.1.3 Layer Header

8.3.1.3.1 Layer Specific Information

This section specifies the 8-bit enumeration for the Layer Specific Information field in the Layer Header record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>Layer Specific Information</u>
0	Other

8.3.1.4 Secondary Operational Data

This section specifies the 8-bit enumeration of the Operational Parameters 1 and 2 in the Secondary Operational Data record of the IFF/ATC/NAVAIDS PDU.

8.3.1.4.1 Operational Parameter 1

<u>Field Value</u>	<u>Meaning</u>
0	Other

8.3.1.4.2 Operational Parameter 2

<u>Field Value</u>	<u>Meaning</u>
0	Other

8.3.2 System Type 2 (Mark X/II/ATCRBS/MODE S Interrogator)

8.3.2.1 System ID

8.3.2.1.1 Change/Options

This section specifies the 8-bit Boolean array for the Change/Options field in the System ID record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Change Indicator	0 = No change since last report 1 = Initial report or change since last report.
1	Alternate Mode 4	0 = No 1 = Yes
2	Alternate Mode 5/C	0 = No 1 = Yes
3-7	Not used	

8.3.2.1.2 System Type

This section specifies the 16-bit enumeration for the System Type field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Type</u>
0	<i>Other</i>
1	<i>Mark X/XII/ATCRBS/MODE S Transponder</i>
2	<i>Mark X/XII/ATCRBS/MODE S Interrogator</i>
3	<i>Soviet Transponder</i>
4	<i>Soviet Interrogator</i>
5	<i>RRB Transponder</i>

8.3.2.1.3 System Name

This section specifies the 16-bit enumeration for the System Name field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Name</u>
0	<i>Other</i>
1	<i>Mark X</i>
2	<i>Mark XII</i>
3	<i>ATCRBS</i>
4	<i>Soviet</i>
5	<i>Mode S</i>
6	<i>Mark X/XII/ATCRBS</i>
7	<i>Mark X/XII/ATCRBS/Mode S</i>
8	<i>ARI 5954</i>
9	<i>ARI 5983</i>
10+	<i>Not used</i>

8.3.2.1.4 System Mode

This section specifies the 8-bit enumeration for the System Mode field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Mode</u>
0	Other

8.3.2.2 Fundamental Operational Data

8.3.2.2.1 System Status

This section specifies the 8-bit Boolean array for the System Status field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	System On/Off	0 = Off 1 = On
1	Parameter 1	0 = Capable 1 = Not capable
2	Parameter 2	0 = Capable 1 = Not capable
3	Parameter 3	0 = Capable 1 = Not capable
4	Parameter 4	0 = Capable 1 = Not capable
5	Parameter 5	0 = Capable 1 = Not capable
6	Parameter 6	0 = Capable 1 = Not capable
7	Operational Status	0 = Operational 1 = System failed

8.3.2.2.2 Parameter 1 - Mode 1 Interrogator Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.2.2.3 Parameter 2 - Mode 2 Interrogator Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off

14	Damage	1 = On 0 = No damage
15	Malfunction	1 = Damaged 0 = No malfunction 1 = Malfunction

8.3.2.2.4 Parameter 3 - Mode 3/A Interrogator Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.2.2.5 Parameter 4 - Mode 4 Interrogator Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-11	Code element 1	0-4094 = "Pseudo-Crypto" value 4095 = use Alternate Mode 4 value
12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.2.2.6 Parameter 5 - Mode 5/C Interrogator Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.2.2.7 Parameter 6 - Mode S Code/Status

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-11	To be defined.	
12	TCAS	0 = TCAS I 1 = TCAS II
13	Status	0 = Off 1 = On

14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.2.2.8 Modifier

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-7	Not used	0

8.3.2.2.9 Alternate Parameter 4

<u>Field Value</u>	<u>Alternate Parameter 4</u>
0	Other
1	Valid
2	Invalid
3	No Response
4+	Not used

8.3.2.2.10 Information Layers

This section specifies the 8-bit Boolean array for the Information Layer Field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Not used	0
1	Layer 1	0 = Not Present 1 = Present
2	Layer 2	0 = Not Present 1 = Present
3-7	Not used	0

8.3.2.3 Layer Header

8.3.2.3.1 Layer Specific Information

This section specifies the 8-bit enumeration for the Layer Specific Information field in the Layer Header record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>Layer Specific Information</u>
0	Other

8.3.2.4 Secondary Operational Data

This section specifies the 8-bit enumeration of the Operational Parameters 1 and 2 in the Secondary Operational Data record of the IFF/ATC/NAVAIDS PDU.

8.3.2.4.1 Operational Parameter 1

<u>Field Value</u>	<u>Operational Parameter 1</u>
0	Other

8.3.2.4.2 Operational Parameter 2

<u>Field Value</u>	<u>Operational Parameter 2</u>
0	Other

8.3.3 System Type 3 (Soviet Transponder)

8.3.3.1 System ID

8.3.3.1.1 Change/Options

This section specifies the 8-bit Boolean array for the Change/Options field in the System ID record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Change Indicator	0 = No change since last report 1 = Initial report or change since last report.
1-7	Not used	

8.3.3.1.2 System Type

This section specifies the 16-bit enumeration for the System Type field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Type</u>
0	<i>Other</i>
1	<i>Mark X/XII/ATCRBS/MODE S Transponder</i>
2	<i>Mark X/XII/ATCRBS/MODE S Interrogator</i>
3	Soviet Transponder
4	<i>Soviet Interrogator</i>
5	RRB Transponder

8.3.3.1.3 System Name

This section specifies the 16-bit enumeration for the System Name field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Name</u>
0	<i>Other</i>
1	<i>Mark X</i>
2	<i>Mark XII</i>
3	ATCRBS

4	Soviet
5	Mode S
6	Mark X/XII/ATCRBS
7	Mark X/XII/ATCRBS/Mode S
8	ARI 5954
9	ARI 5983
10+	Not used

8.3.3.1.4 System Mode

This section specifies the 8-bit enumeration for the System Mode field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Mode</u>
0	Other

8.3.3.2 Fundamental Operational Data

8.3.3.2.1 System Status

This section specifies the 8-bit Boolean array for the System Status field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	System On/Off	0 = Off 1 = On
1	Parameter 1	0 = Capable 1 = Not capable
2	Parameter 2	0 = Capable 1 = Not capable
3	Parameter 3	0 = Capable 1 = Not capable
4	Parameter 4	0 = Capable 1 = Not capable
5	Parameter 5	0 = Capable 1 = Not capable
6	Parameter 6	0 = Capable 1 = Not capable
7	Operational Status	0 = Operational 1 = System failed

8.3.3.2.2 Parameter 1

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction

1 = Malfunction

8.3.3.2.3 Parameter 2

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.3.2.4 Parameter 3

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.3.2.5 Parameter 4

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.3.2.6 Parameter 5

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.3.2.7 Parameter 6

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.3.2.8 Modifier

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-7	Not used	0

8.3.3.2.9 Alternate Parameter 4

<u>Field Value</u>	<u>Alternate Parameter 4</u>
All values	Not used

8.3.3.2.10 Information Layers

This section specifies the 8-bit Boolean array for the Information Layer Field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Not used	0
1	Layer 1	0 = Not Present 1 = Present
2	Layer 2	0 = Not Present 1 = Present
3-7	Not used	0

8.3.3.3 Layer Header

8.3.3.3.1 Layer Specific Information

This section specifies the 8-bit enumeration for the Layer Specific Information field in the Layer Header record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>Layer Specific Information</u>
0	Other

8.3.3.4 Secondary Operational Data

This section specifies the 8-bit enumeration of the Operational Parameters 1 and 2 in the Secondary Operational Data record of the IFF/ATC/NAVAIDS PDU.

8.3.3.4.1 Operational Parameter 1

<u>Field Value</u>	<u>Operational Parameter 1</u>
0	Other

8.3.3.4.2 Operational Parameter 2

<u>Field Value</u>	<u>Operational Parameter 2</u>
0	Other

8.3.4 System Type 4 (Soviet Interrogator)

8.3.4.1 System ID

8.3.4.1.1 Change/Options

This section specifies the 8-bit Boolean array for the Change/Options field in the System ID record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Change Indicator	0 = No change since last report 1 = Initial report or change since last report.
1-7	Not used	

8.3.4.1.2 System Type

This section specifies the 16-bit enumeration for the System Type field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Type</u>
0	Other
1	<i>Mark X/XII/ATCRBS/MODE S Transponder</i>
2	<i>Mark X/XII/ATCRBS/MODE S Interrogator</i>
3	<i>Soviet Transponder</i>
4	<i>Soviet Interrogator</i>
5	<i>RRB Transponder</i>

8.3.4.1.3 System Name

This section specifies the 16-bit enumeration for the System Name field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Name</u>
0	<i>Other</i>
1	<i>Mark X</i>
2	<i>Mark XII</i>
3	<i>ATCRBS</i>

4	Soviet
5	Mode S
6	Mark X/XII/ATCRBS
7	Mark X/XII/ATCRBS/Mode S
8	ARI 5954
9	ARI 5983
10+	Not used

8.3.4.1.4 System Mode

This section specifies the 8-bit enumeration for the System Mode field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Mode</u>
0	Other

8.3.4.2 Fundamental Operational Data

8.3.4.2.1 System Status

This section specifies the 8-bit Boolean array for the System Status field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	System On/Off	0 = Off 1 = On
1	Parameter 1	0 = Capable 1 = Not capable
2	Parameter 2	0 = Capable 1 = Not capable
3	Parameter 3	0 = Capable 1 = Not capable
4	Parameter 4	0 = Capable 1 = Not capable
5	Parameter 5	0 = Capable 1 = Not capable
6	Parameter 6	0 = Capable 1 = Not capable
7	Operational Status	0 = Operational 1 = System failed

8.3.4.2.2 Parameter 1

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction

1 = Malfunction

8.3.4.2.3 Parameter 2

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.4.2.4 Parameter 3

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.4.2.5 Parameter 4

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.4.2.6 Parameter 5

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.4.2.7 Parameter 6

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
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0-12	Not used	0
13	Status	0 = Off 1 = On
14	Damage	0 = No damage 1 = Damaged
15	Malfunction	0 = No malfunction 1 = Malfunction

8.3.4.2.8 Modifier

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-7	Not used	0

8.3.4.2.9 Alternate Parameter 4

<u>Field Value</u>	<u>Alternate Parameter 4</u>
All values	Not used 0

8.3.4.2.10 Information Layers

This section specifies the 8-bit Boolean array for the Information Layer Field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Not used	0
1	Layer 1	0 = Not Present 1 = Present
2	Layer 2	0 = Not Present 1 = Present
3-7	Not used	0

8.3.4.3 Layer Header

8.3.4.3.1 Layer Specific Information

This section specifies the 8-bit enumeration for the Layer Specific Information field in the Layer Header record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>Layer Specific Information</u>
0	Other

8.3.4.4 Secondary Operational Data

This section specifies the 8-bit enumeration of the Operational Parameters 1 and 2 in the Secondary Operational Data record of the IFF/ATC/NAVAIDS PDU.

8.3.4.4.1 Operational Parameter 1

<u>Field Value</u>	<u>Operational Parameter 1</u>
0	Other

8.3.4.4.2 Operational Parameter 2

<u>Field Value</u>	<u>Operational Parameter 2</u>
0	Other

8.3.5 System Type 5 (RRB Transponder)

8.3.5.1 System ID

8.3.5.1.1 Change/Options

This section specifies the 8-bit Boolean array for the Change/Options field in the System ID record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Change Indicator	0 = No change since last report 1 = Initial report or change since last report.
1-7	Not used	

8.3.5.1.2 System Type

This section specifies the 16-bit enumeration for the System Type field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Type</u>
0	Other
1	Mark X/XII/ATCRBS/MODE S Transponder
2	Mark X/XII/ATCRBS/MODE S Interrogator
3	Soviet Transponder
4	Soviet Interrogator
5	RRB Transponder

8.3.5.1.3 System Name

This section specifies the 16-bit enumeration for the System Name field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Name</u>
0	Other
1	Mark X
2	Mark XII
3	ATCRBS
4	Soviet
5	Mode S
6	Mark X/XII/ATCRBS

7	Mark X/XII/ATCRBS/Mode S
8	ARI 5954
9	ARI 5983
10+	Not used

8.3.5.1.4 System Mode

This section specifies the 8-bit enumeration for the System Mode field in the System Identifier record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>System Mode</u>
0	Other

8.3.5.2 Fundamental Operational Data

8.3.5.2.1 System Status

This section specifies the 8-bit Boolean array for the System Status field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	System On/Off	0 = Off 1 = On
1	Parameter 1	0 = Capable 1 = Not capable
2	Parameter 2	0 = Capable 1 = Not capable
3	Parameter 3	0 = Capable 1 = Not capable
4	Parameter 4	0 = Capable 1 = Not capable
5	Parameter 5	0 = Capable 1 = Not capable
6	Parameter 6	0 = Capable 1 = Not capable
7	Operational Status	0 = Operational 1 = System failed

8.3.5.2.2 Parameter 1 - RRB Response

Note that RRB codes are not octal codes. The complete RRB code is stored as a decimal number in the specified bits.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-4	Code	Code value (decimal)
5-10	Not used	0
11	Power Reduction	0 = Off 1 = On
12	Radar Enhancement	0 = Off

13	Status	1 = On 0 = Off
14	Damage	1 = On 0 = No damage
15	Malfunction	1 = Damaged 0 = No malfunction 1 = Malfunction

8.3.5.2.3 Parameter 2

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-15	Not used	0

8.3.5.2.4 Parameter 3

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-15	Not used	0

8.3.5.2.5 Parameter 4

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-15	Not used	0

8.3.5.2.6 Parameter 5

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-15	Not used	0

8.3.5.2.7 Parameter 6

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-15	Not used	0

8.3.5.2.8 Modifier

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0-7	Not used	0

8.3.5.2.9 Alternate Parameter 4

<u>Field Value</u>	<u>Alternate Parameter 4</u>
0	Not used

8.3.5.2.10 Information Layers

This section specifies the 8-bit Boolean array for the Information Layer Field in the Fundamental Operational Data record of the IFF/ATC/NAVAIDS PDU.

<u>Bit</u>	<u>Meaning</u>	<u>Values</u>
0	Not used	0
1	Layer 1	0 = Not Present 1 = Present
2	Layer 2	0 = Not Present 1 = Present
3-7	Not used	0

8.3.5.3 Layer Header

8.3.5.3.1 Layer Specific Information

This section specifies the 8-bit enumeration for the Layer Specific Information field in the Layer Header record of the IFF/ATC/NAVAIDS PDU.

<u>Field Value</u>	<u>Layer Specific Information</u>
0	Other

8.3.5.4 Secondary Operational Data

This section specifies the 8-bit enumeration of the Operational Parameters 1 and 2 in the Secondary Operational Data record of the IFF/ATC/NAVAIDS PDU.

8.3.5.4.1 Operational Parameter 1

<u>Field Value</u>	<u>Operational Parameter 1</u>
0	Other

8.3.5.4.2 Operational Parameter 2

<u>Field Value</u>	<u>Operational Parameter 2</u>
0	Other

8.3.6 Specific Issuance/Receipt Rules

8.3.6.1 Issuance Rules: System Type 1 (Mark X/XII/ATCRBS/Mode S Transponder)

- 1) System ID Record: Alternate Mode 4. Any application that transmits Mode 4 shall always set the Alternate Mode 4 field to the appropriate value in the Fundamental Data Record and shall set the Alternate Mode 4 field in the System ID Record to 1. The application may also send a "pseudo-crypto" value in the Mode 4 parameter if coordinated with other sites prior to the exercise.

- 2) System ID Record: Alternate Mode 5/C. Any application that transmits Mode 5/C shall always set the Alternate Mode 5/C field to the appropriate value in the Fundamental Data Record and shall set the Alternate Mode 5/C field in the System ID Record to 1. The application may also send the actual Mode 5/C encoded altimeter in the Mode 5/C parameter.
- 3) Fundamental Operational Data Record: System Status: System On/Off. The System On/Off Status shall be set to 1 if any of the Modes (Parameters 1-6) are set to On. Otherwise the status shall be set to Off. If the Entity State PDU Appearance Damage Status value = 3 (Destroyed) for the associated entity and the entity is not canceled at the time it is destroyed, the System Status/System On/Off field and all Parameter 1-6 Status fields (Bit 13) for Capable modes shall be set to 1 (Off). This change in status shall be automatically set within 10 seconds of the simulation determining that the entity could no longer transmit a reply to an interrogation. For the destroyed case, it is not required that the Operational Status field be set to System Failed or the Parameter 1-6 Damage or Malfunction Status fields be set to 1. However, these fields can be set if desired. At least three periodic updates shall be sent for the IFF/ATC/NAVAIDS PDU following the change to Off status due to the entity being destroyed. After the three periodic updates are sent, a simulation may either continue to send periodic updates or cease sending them.
- 4) Fundamental Operational Data Record: System Status: Capable Parameters 1-6
Any application that transmits an IFF/ATC/NAVAIDS PDU with System Type =1 shall set the Capable Parameters 1-6 to report which modes are capable and not capable of being transponded by the emitting entity.
- 5) Fundamental Operational Data Record: Operational Status. This status shall be set to 1 (System failed) if no Parameter 1-6 or Modifier parameter (Emergency, Squawk Flash, STI) can be transponded regardless of the System Status/System On/Off field setting. Otherwise, the status shall be set to 0.
- 6) Fundamental Operational Data Record: Parameter 1-6 Codes. Codes shall reflect the present code settings for an entity at the time an IFF/ATC/NAVAIDS PDU is transmitted and are independent of the present Mode Status settings. Code 0 shall not be used to indicate off for a mode. However, code zero may be transmitted for a mode if that is the setting for the transponder. Mode 1, 2, and 3 codes represent octal values that are set into the appropriate code elements. Each associated parameter is an unsigned integer that includes both the code and status values. When decoded, the code elements are converted back to the appropriate octal values. If actual Mode 5/C encoded altitude is being transmitted, an IFF/ATC/NAVAIDS PDU shall be transmitted once for each 100-foot change in entity altitude.
- 7) Fundamental Operational Data Record: Modifier Parameters. When a Modifier parameter is set to on to report truth data not related to a specific interrogation reported in an IFF/ATC/NAVAIDS PDU, and the condition is transitory, such as the Squawk Flash, the issuing application shall ensure that an IFF/ATC/NAVAIDS PDU is transmitted with the parameter set to off when the transitory condition has ended. For Squawk Flash, the On state shall be for 30 seconds when not responding to a specific interrogation.
- 8) Fundamental Operational Data Record: Alternate Mode 4. The Alternate Mode 4 values shall be set to 1, 2 or 3 if the entity is capable of transmitting Mode 4 as reflected in the Capable parameter regardless of whether Actual Mode 4 Pseudo-Crypto is also included in the Parameter 4.

9) System ID Record: Change Indicator. The Change Indicator shall be set to 1 for all initial reports and whenever a change is being reported even if the change coincides with a periodic update report. For all other cases, the Change indicator shall be set to 0.

8.3.6.2 Receipt Rules: System Type 1 (Mark X/XII/ATCRBS/Mode S Transponder)

1) System ID Record: Alternate Mode 4. Any application that can receive Mode 4 data shall be able, as a minimum, to process the Alternate Mode 4 field to derive the present Mode 4 value. If an application can also process any "pseudo-crypto" value contained in the Mode 4 parameter, it may either process the Mode 4 value or the Alternate Mode 4 value. If an application can detect a conflict in the Valid/ Invalid setting between the values in the two fields, the Alternate Mode 4 field value shall be the value that is accepted.

2) System ID Record: Alternate Mode 5/C. Any application that can receive Mode 5/C shall be able, as a minimum, to process the Alternate Mode 5/C field in the Fundamental Data Record. If an application can also process an encoded altimeter value contained in the Mode 5/C parameter, it may either process the Mode 5/C value or the Alternate Mode 5/C value (i.e., use the entity's altitude value derived from the Entity State PDU.) If an application can detect a conflict in the values contained in the two fields, the Mode 5/C field value shall be the value that is accepted and not the entity altitude from the Entity State PDU.

4) Fundamental Operational Data Record: System Status: Capable Parameters 1-5. If the Not Capable field is set for a specific parameter (1-5), the receiving site/application need not process that Parameter's values in the Fundamental Operational Data Record.

5) Fundamental Operational Data Record: Parameter 1-3 Codes. Mode 1, 2 and 3 code values of zero shall be valid and shall not be interpreted as a Mode Off status.

6) If a receiving site/application has the capability to set transponder data for received entities for distribution to other applications not directly connected on the DIS network, receipt of transponder data on the received entity shall always override locally entered data for the received entity.

7) A receiving site/application may perform validity checks on parameter data to ensure they are within the limits specified in the DIS enumeration document. Only invalid data for the specific parameter processed shall be ignored. Any previously accepted data for that parameter may either be retained or cleared.

8) Fundamental Operational Data Record: Mode Status. The Mode Status - Damage and Malfunction field values shall be processed upon receipt as agreed to by participants prior to a DIS exercise.

9) Fundamental Operational Data Record: Parameter 6. Mode S data elements shall be agreed to by participants prior to a DIS Exercise.

8.3.6.3 Issuance Rules: System Type 5 (RRB Transponder)

1) Fundamental Operational Data Record: System Status: Capable. All RRB Transponders shall set the Parameter 1 system status bit to 0 (Capable) and the Parameters 2-6 system status bits to 1 (Not Capable).

- 2) Fundamental Operational Data Record: System Status: System On/Off. The System On/Off Status shall be set to 1 (On) if the RRB Response Status (bit 13 in Parameter 1) is set to 1 (On), the RRB Response Damage (bit 14 in Parameter 1) is set to 0 (No Damage) and the RRB Response Malfunction (bit 15 in Parameter 1) is set to 0 (no malfunction). Otherwise the status shall be set to 0 (Off). If the Entity State PDU Appearance Damage Status value = 3 (Destroyed) for the associated entity and the entity is not canceled at the time it is destroyed, the System Status/System On/Off field and the Parameter 1 Status fields (Bit 13) shall be set to 0 (Off). This change in status shall be automatically set within 10 seconds of the simulation determining that the entity could no longer transmit a reply to an interrogation. For the destroyed case, it is not required that the Operational Status field be set to System Failed or the Parameter 1 Damage or Malfunction Status fields be set to 1. However, these fields can be set if desired. At least three periodic updates shall be sent for the IFF/ATC/NAVAIDS PDU following the change to Off status due to the entity being destroyed. After the three periodic updates are sent, a simulation may either continue to send periodic updates or cease sending them.
- 3) Fundamental Operational Data Record: Operational Status. This status shall be set to 1 (System failed) if the RRB Response Damage bit (bit 14 in Parameter 1) is set to 1 (Damaged) or the RRB Reponse Malfunction bit (bit 15 in Parameter 1) is set to 1 (Malfunction). Otherwise, the status shall be set to 0.
- 4) Fundamental Operational Data Record: Parameter 1 Code. Codes shall reflect the present code settings for an entity at the time an IFF/ATC/NAVAIDS PDU is transmitted and are independent of the present Mode Status settings. Code 0 shall not be used to indicate off for a mode. However, code zero may be transmitted for a mode if that is the setting for the transponder.
- 5) System ID Record: Change Indicator. The Change Indicator shall be set to 1 for all initial reports and whenever a change is being reported even if the change coincides with a periodic update report. For all other cases, the Change indicator shall be set to 0.

8.3.6.4 Receipt Rules: System Type 5 (RRB Transponder)

- 1) Fundamental Operational Data Record: Parameter 1 Codes. Code values of zero shall be valid and shall not be interpreted as a Mode Off status.
- 2) If a receiving site/application has the capability to set transponder data for received entities for distribution to other applications not directly connected on the DIS network, receipt of transponder data on the received entity shall always override locally entered data for the received entity.
- 3) A receiving site/application may perform validity checks on parameter data to ensure they are within the limits specified in the DIS enumeration document. Only invalid data for the specific parameter processed shall be ignored. Any previously accepted data for that parameter may either be retained or cleared.
- 4) Fundamental Operational Data Record: Mode Status. The Mode Status - Damage and Malfunction field values shall be processed upon receipt as agreed to by participants prior to a DIS exercise.

8.4 Underwater Acoustic PDU

8.4.1 State/Change Update indicator

This section specifies the 8-bit enumeration for the State/Change Update Indicator in the Underwater Acoustics PDU.

<u>Field Value</u>	<u>State/Change Update indicator</u>
0	State Update
1	Changed Data Update

8.4.2 Acoustic System Name

This section specifies the 16-bit enumeration for the Acoustic System Name field of the Acoustic Emitter System record of the Underwater Acoustics PDU.

<u>Field Value</u>	<u>Acoustic</u>	<u>System Name</u>
0	Other	
1	AN/BQQ-5	
2	AN/SSQ-62	
3	AN/SQS-23	
4	AN/SQS-26	
5	AN/SQS-53	
6	ALFS	
7	LFA	
8	AN/AQS-901	
9	AN/AQS-902	

8.4.3 Function

This section specifies the 8-bit enumeration for the Function field of the Acoustic Emitter System record of the Underwater Acoustics PDU.

<u>Field Value</u>	<u>Function</u>
0	Other
1	Platform search/detect/track
2	Navigation
3	Mine hunting
4	Weapon search/detect/track/detect

8.4.4 Active Emission Parameter Index (filename)

This section specifies the 16-bit enumeration for the Active Emission Parameter Index field in the Underwater Acoustics Fundamental Parameter Data record of the Underwater Acoustics PDU.

<u>Field Value</u>	<u>Active Emission Parameter Index</u>
0	Other

8.4.5 Scan Pattern

This section specifies the 16-bit enumeration for the Scan Pattern field in the Underwater Acoustics Fundamental Parameter Data record of the Underwater Acoustics PDU.

<u>Field Value</u>	<u>Scan Pattern</u>
0	Scan pattern not used
1	Conical
2	Helical
3	Raster
4	Sector search
5	Continuous search

8.4.6 Passive Parameter Index

This section specifies the 16-bit enumeration for the Passive Parameter Index field in the Underwater Acoustics PDU.

<u>Field Value</u>	<u>Passive Parameter Index</u>
0	Other

8.4.7 Propulsion Plant Configuration

This section specifies the 7-bit enumerations for the Propulsion Plant Configuration field of the Underwater Acoustics PDU. Bit 7 of the Propulsion Plant Configuration field is a Hull Mounted Masker status bit.

<u>Field Value (Bits 0-6)</u>	<u>Propulsion Plant Configuration</u>
0	Other
1	Diesel/electric
2	Diesel
3	Battery
4	Turbine reduction
6	Steam
7	Gas turbine
Bit 7	Hull Mounted Masker status 0 =Off 1 =On

8.4.8 Additional Passive Activity Parameter Index

This section specifies the 16-bit enumerations for the Additional Passive Activity Parameter Index field in the Underwater Acoustic PDU.

<u>Field Value</u>	<u>Additional Passive Activity Parameter Index</u>
0	Other
1	Graham's MKV Coffee Maker
>32768	Reserved for classified enumerations Point of Contact =

8.5 SEES PDU

8.5.1 Engine Power Setting Values

This section specifies the 32-bit floating point enumerations for the Engine Power Settings in the SEES Propulsion System Data record of the SEES PDU.

8.5.1.1 Aircraft

<u>Field value</u>	<u>Engine Power Setting</u>
-100	Engine Off
0	Idle Power
50	Mil. Power
51	Min. A/B
100	Max. A/B

8.5.1.2 Helicopters

<u>Field value</u>	<u>Engine Power Setting</u>
-100	Engine Off
0	Idle Power
100	Max. Power

8.5.1.3 Tanks

<u>Field value</u>	<u>Engine Power Setting</u>
-100	Engine Off
0	Idle Power
100	Max. Power

9.0 Radio Communications family

9.1 Transmitter PDU

9.1.1 Modulation Type record

9.1.1.1 Spread Spectrum

This section specifies the 16-bit Boolean array for the Spread-Spectrum field in the Modulation-Type record of the Transmitter PDU.

All bits set to zero indicates that spread-spectrum modulation is not in use. Individual bits set to one indicate the use of spread spectrum as follows:

<u>Bit #</u>	<u>Spread Spectrum Modulation Type</u>
0	Frequency Hopping
1	Pseudo-noise
2	Time Hopping
3-15	TBD

More than one bit set to one indicates that distinct methods are simultaneously in use.

9.1.1.2 Major Modulation

This section specifies the 16-bit enumeration for the Major-Modulation field in the Modulation-Type record of the Transmitter PDU.

<u>Field Value</u>	<u>Radio Major Modulation</u>
0	Other
1	Amplitude
2	Amplitude and Angle
3	Angle
4	Combination
5	Pulse
6	Unmodulated

9.1.1.3 Detail

This section defines the 16-bit enumerations for the Detail field in the Transmitter PDU.

9.1.1.3.1 Detailed modulation for amplitude modulation

Detailed modulation types for Amplitude Modulation are defined as follows:

<u>Field Value</u>	<u>Detailed Modulation for Amplitude</u>
0	Other
1	AFSK (Audio Frequency Shift Keying)
2	AM (Amplitude Modulation)
3	CW (Continuous Wave Modulation)
4	DSB (Double Sideband)

<u>Field Value</u>	<u>Detailed Modulation for Amplitude</u>
5	ISB (Independent Sideband)
6	LSB (Single Band Suppressed Carrier, Lower Sideband Mode)
7	SSB-Full (Single Sideband Full Carrier)
8	SSB-Reduc (Single Band Reduced Carrier)
9	USB (Single Band Suppressed Carrier, Upper Sideband Mode)
10	VSB (Vestigial Sideband)

9.1.1.3.2 Detailed modulation for amplitude and angle modulation

Detailed modulation types for Amplitude and Angle Modulation are defined as follows:

<u>Field Value</u>	<u>Detailed Modulation for Amplitude and Angle</u>
0	Other
1	Amplitude and Angle

9.1.1.3.3 Detailed modulation for angle modulation

Detailed modulation types for Angle Modulation are defined as follows:

<u>Field Value</u>	<u>Detailed Modulation for Angle</u>
0	Other
1	FM (Frequency Modulation)
2	FSK (Frequency Shift Keying)
3	PM (Phase Modulation)

9.1.1.3.4 Detailed modulation for combination modulation

Detailed modulation types for Combination Modulation are defined as follows:

<u>Field Value</u>	<u>Detailed Modulation for Combination</u>
0	Other
1	Amplitude-Angle-Pulse

9.1.1.3.5 Detailed modulation for pulse modulation

Detailed modulation types for Pulse Modulation are defined as follows:

<u>Field Value</u>	<u>Detailed Modulation for Pulse</u>
0	Other
1	Pulse

9.1.1.3.6 Detailed modulation for unmodulated modulation

Detailed modulation types for an unmodulated carrier are defined as follows:

<u>Field Value</u>	<u>Detailed Modulation for Unmodulated</u>
0	Other
1	Continuous Wave emission of an unmodulated carrier

9.1.1.4 System

This section specifies the 16-bit enumeration for the System field in the Modulation-Type record of the Transmitter PDU.

<u>Field Value</u>	<u>Radio System</u>
0	Other
1	Generic
2	HQ
3	HQII
4	HQIIA
5	SINCGARS
6	CCTT SINCGARS

9.1.2 Transmit State

This section specifies the 8-bit enumeration for the Transmit-State field in the Transmitter PDU.

<u>Field Value</u>	<u>Radio Transmit State</u>
0	Off
1	On but not transmitting
2	On and transmitting

9.1.3 Input Source

This section specifies the 8-bit enumeration for the Input-Source field in the Transmitter PDU.

<u>Field Value</u>	<u>Radio Input Source</u>
0	Other
1	Pilot
2	Copilot
3	First Officer
4	Driver
5	Loader
6	Gunner
7	Commander
8	Digital Data Device
9	Intercom

9.1.4 Crypto System

This section specifies the 16-bit enumeration for the Crypto-System field in the Transmitter PDU.

<u>Field Value</u>	<u>Radio Crypto System</u>
0	Other
1	KY-28
2	KY-58
3	Narrow Spectrum Secure Voice (NSVE)
4	Wide Spectrum Secure Voice (WSVE)
5	SINGGARS ICOM

9.1.5 Antenna Pattern Type

This section specifies the 16-bit enumeration for the Antenna Pattern Type field in the Transmitter PDU.

<u>Field Value</u>	<u>Antenna Pattern Type</u>
0	Omni-directional
1	Beam
2	Spherical harmonic

9.1.6 Reference System

This section specifies the 8-bit enumeration for the Reference System field in the Beam Antenna Pattern record and the Spherical Harmonic Pattern Record in the Transmitter PDU. The enumeration for the Reference System are limited to the two listed below.

<u>Field Value</u>	<u>Reference System</u>
1	World Coordinates
2	Entity Coordinates

9.1.7 Modulation Parameters, used in the Transmitter PDU

This section specifies the Modulation Parameters in the Transmitter PDU.

9.1.7.1 CCTT SINGGARS Modulation Parameters

Detailed information about the CCTT SINGGARS (Radio System Type 6) shall be communicated by using the Modulation Parameters in the Transmitter PDU. The Modulation Parameters shall contain the following fields:

1. FH Data - These fields are only used when the SINGGARS radio is in FH mode. They determine the hopping pattern of the SINGGARS radio. If any one of these fields is different, except FH Synchronization Time Offset, the hopping pattern is different. Radios on different hopping patterns shall not communicate.
 - a) FH Net ID - This field shall identify the frequency hopping network.

- b) Hop Set ID - This field shall identify the set of frequencies used when creating a hopping pattern. The frequencies in the hop set are transmitted by a method outside the scope of this standard.
 - c) Lockout Set ID - This field shall identify the set of frequencies that are excluded from the hopping pattern. The frequencies in the lockout set are transmitted by a method outside the scope of this standard.
 - d) Transmission Security Key - This field shall identify the transmission security key that is used when generating the hopping pattern. (Not currently implemented, field added for future use).
 - e) FH Synchronization Time Offset - This field shall identify the offset to exercise time in seconds for the clock in the SINCGARS radio. SINCGARS radio clock must be synchronized for the radios to communicate. (Not currently implemented, field added for future use).
2. Start of Message - This field shall specify whether the radio is starting or continuing a transmission. A SINCGARS radio shall not receive any part of an FH transmission if the Start of Message is missed. Start of message may be missed if the radio was transmitting, receiving a different radio or otherwise not ready to start receiving a transmission.
 3. Clear Channel - This field shall specify that the transmission is not subject to propagation loss, interference, comsec or any other form of signal degradation. Clear channels are used for interoperability with older systems and for control purposes.

FH Net ID	16-bit unsigned integer
Hop Set ID	16-bit unsigned integer
Lockout Set ID	16-bit unsigned integer
Start of Message	8-bit enumeration
Reserved	8-bit
FH Synchronization Time Offset	32-bit signed integer
Transmission Security Key	16-bit unsigned integer
Clear Channel	8-bit unsigned integer

9.1.7.1.1 Start of Message

This section specifies the 8-bit enumeration for the Start of Message field in the CCTT SINCGARS Modulation Parameters.

<u>Field Value</u>	<u>Enumeration</u>
0	Not start of message
1	Start of Message

9.1.7.1.2 Clear Channel

This section specifies the 8-bit enumeration for the Clear Channel field in the CCTT SINCGARS Modulation Parameters.

<u>Field Value</u>	<u>Enumeration</u>
0	Not clear channel
1	Clear channel

9.2 Signal PDU

The Encoding-Scheme field of the Signal PDU is broken into two parts. Bits 15 and 14 are the Encoding Class, described in 4.2.27.1; bits 13-0 are the Encoding Types, described in 4.2.27.2.

9.2.1 Radio signal encoding class

Encoding Classes (bits 15 and 14) are:

<u>Field Value (bits 15, 14)</u>	<u>Radio Signal Encoding Class</u>
0 (0,0)	Encoded audio
1 (0,1)	Raw Binary Data
2 (1,0)	Application-Specific Data
3 (1,1)	Database index

9.2.2 Radio signal encoding type

Encoding Types (bits 13-0) are:

<u>Field Value</u>	<u>Radio Signal Encoding Type</u>
1	8-bit mu-law
2	CVSD per MIL-STD-188-113
3	ADPCM per CCITT G.721
4	16-bit linear PCM
5	8-bit linear PCM
6	VQ (Vector Quantization)

9.2.3 User Protocol Identification Number

The first sub-field of the Signal PDU Data Field contains a User Protocol Identification Number when the Encoding Class field indicates Application Specific Data. The enumerations for the User Protocol Identification are as follows:

<u>Field Value</u>	<u>User Protocol Name</u>	<u>Summary of Representation</u>	<u>Point of Contact</u>
1	CCSIL		Marnie Salisbury MARNIE@MITRE.ORG
5	A2ATD SINCGARS ERF	Binary data	Chuck Woodman WOODMAN@ORLANDO. LORAL.COM
6	A2ATD CAC2	Binary Report/ Overlay data	Wayne Beard WBEARD@ORLANDO. LORAL.COM
20	Battle Command	Abbreviated Command and Control	Gary Gagnon ggagnon@cas-inc.com

<u>Field Value</u>	<u>User Protocol Name</u>	<u>Summary of Representation</u>	<u>Point of Contact</u>
177	ModSAF Text Radio	Free Format ASCII Text	Richard Schaffer RSCHAFFER@CAMB-LADS.LORAL.COM
200	CCTT SINGARS ERF-LOCKOUT	Binary Data	Jim Keenan jimk@greatwall.cctt.com
201	CCTT SINGARS ERF-HOPSET	Binary Data	Jim Keenan jimk@greatwall.cctt.com
202	CCTT SINGARS OTAR	Binary Data	Jim Keenan jimk@greatwall.cctt.com
203	CCTT SINGARS DATA	Binary Data	Jim Keenan jimk@greatwall.cctt.com
546	ModSAF FWA Forward Air Controller	Binary data	Dan Coffin dcoffin@camb-lads.loral.com
832	ModSAF Threat ADA C3	Binary data	Dan Coffin dcoffin@camb-lads.loral.com
4570	ModSAF Artillery Fire Control	Structured text followed by binary data	Richard Schaffer RSCHAFFER@CAMB-LADS.LORAL.COM
5361	AGTS	Binary Report/ Overlay data	Steve Gendreau GENDREAU@ESCMail.ORL.MMC.COM
6000	GC3	Binary data	Karl Shepherd karl.shepherd@gsc.gte.com
6010	WNCP data	Binary data	Karl Shepherd karl.shepherd@gsc.gte.com
6020	Spoken text message	Data about speaker followed by free ASCII text	Brett Kaylor GTE Government Systems brett.kaylor@gsc.gte.com

9.2.4 TDL Type

This section specifies the 16-bit enumeration for the TDL Type field in the Signal PDU.

<u>Field Value</u>	<u>TDL Type</u>
0	Other
15	Abbreviated Command and Control
99	GC3

9.3 Receiver PDU

This section specifies the 16-bit enumeration for the Receiver-State field in the Receiver PDU.

<u>Field Value</u>	<u>Radio Receiver State</u>
0	Off
1	On but not receiving
2	On and receiving

9.4 Intercom Control PDU

9.4.1 Control Type

This section specifies the 8-bit enumeration for the Control Type field in the Intercom Control PDU.

<u>Field Value</u>	<u>Control Type</u>
0	Reserved
1	Status
2	Request - Acknowledge Required
3	Request - No Acknowledge
4	Ack - Request Granted
5	Nack - Request Denied
6-255	Reserved

9.4.2 Communications Type

This section specifies the 7-bit enumeration for the Communications Type sub-field of the Communications Channel Type field in the Intercom Control PDU.

<u>Field Value</u>	<u>Communications Type</u>
0	Reserved
1	Connection FDX
2	Connection HDX - Destination is Receive Only
3	Connection HDX - Destination is Transmit Only
4	Connection HDX
5-255	Reserved

9.4.3 Command

This section specifies the 8-bit enumeration for the Command field in the Intercom Control PDU.

<u>Field Value</u>	<u>Command</u>
0	No Command
1	Status
2	Connect
3	Disconnect
4	Reset
5	On
6	Off
7-255	Reserved

9.4.4 Transmit Line State

This section specifies the 8-bit enumeration for the Transmit Line State field in the Intercom Control PDU.

<u>Field Value</u>	<u>Transmit Line State</u>
0	Transmit Line State not applicable
1	Not Transmitting

2	Transmitting
3-255	Reserved

9.4.5 Destination Line State Command

This section specifies the 8-bit enumeration for the Destination Line State field in the optional Intercom Communications Parameters records (see 9.4.6) in the Intercom Control PDU.

<u>Field Value</u>	<u>Destination Line State Command</u>
0	None
1	Set Line State - Transmitting
2	Set Line State - Not Transmitting
3	Return to Local Line State Control
4-255	Reserved

9.4.6 Intercom Communications Parameters records

9.4.6.1 Record type

This section specifies the 16-bit enumerations for the Record Type field in the Intercom Communications Parameters record of the Intercom Control PDU.

<u>Field Value</u>	<u>Record Type</u>
1	Entity Destination record
2	Group Destination record
3	Group Assignment record

9.4.6.2 Intercom Communications Parameters records

This section contains the specification of specific Intercom Communications Parameters records for use in the Intercom Control PDU.

9.4.6.2.1 Entity Destination record

This record shall be used to send an Intercom Control PDU directly to a specific entity.

16	Record Type = 1
16	Record Length = 12
48	Destination Entity ID
16	Destination Communications Device ID
8	Destination Line ID
8	Destination Priority
8	Destination Line State Command
8	Padding

9.4.6.2.2 Group Destination record

This record shall be used to send an Intercom Control PDU to an arbitrary group.

16	Record Type = 2
16	Record Length = 8
32	Destination Group Bit Field
8	Destination Priority
8	Destination Line State Command
16	Padding

9.4.6.2.3 Group Assignment record

This record shall be used to assign a group bit field to a specific entity. A bit set to one shall indicate membership in the corresponding group. Multiple bits can be set to indicate membership in multiple groups.

16	Record Type = 3
16	Record Length = 16
32	Group Bit Field
48	Destination Entity ID
16	Destination Communications Equipment ID
8	Destination Line ID
24	Reserved

10.0 Entity Information/Interaction family

10.1 Collision PDU

10.1.1 Collision Type

This field specifies the 8-bit record of enumeration for the Collision Type-field in the Collision PDU

<u>Filed value</u>	<u>Collision type</u>
0	Inelastic
1	Elastic

10.2 Minefield Data PDU

10.2.1 Appearance Bit Map

The bits of the Minefield State PDU Appearance bit map are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Minefield type	0-1	Identifies the type of minefield 0 - Mixed anti-personnel and anti-tank minefield 1 - Pure anti-personnel minefield 2 - Pure anti-tank minefield
Active Status	2	Identifies the active status of the minefield 0 - Active 1 - Inactive
Lane	3	Identifies whether the minefield has an active lane 0 - Minefield has active lane 1 - Minefield has an inactive lane
State	13	4-12 Unused Describes the state of the minefield 0 - Active 1 - Deactivated 14-15 Unused

10.2.2 Data Filter

This section specifies the 32-bit enumeration for the Data Filter field of the Minefield Query PDU and the Minefield Data PDU

<u>Name</u>	<u>Bit</u>	<u>Purpose</u>
Ground Burial Depth Offset	0	Identifies whether Ground Burial Depth Offset data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Water Burial Depth Offset	1	Identifies whether Water Burial Depth Offset data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Snow Burial Depth Offset	2	Identifies whether Snow Burial Depth Offset data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Mine Orientation	3	Identifies whether Mine Orientation data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Thermal Contrast	4	Identifies whether Thermal Contrast data is requested / present 0 - Data not requested / present 1 - Data is requested / present

Reflectance	5	Identifies whether Dielectric Constant data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Mine Emplacement Age	6	Identifies whether Mine Emplacement Age data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Trip/Detonation Wire	7	Identifies whether Trip / Detonation Wire Location data Location is requested / present 0 - Data not requested / present 1 - Data is requested / present
Fusing	8	Identifies whether Fusing data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Scalar Detection Coefficient	9	Identifies whether Scalar Detection Coefficient data is requested / present 0 - Data not requested / present 1 - Data is requested / present
Paint Scheme	10	Identifies whether Paint Scheme data is requested / present 0 - Data not requested / present 1 - Data is requested / present
	11-31	Unused

10.2.3 Fusing

This section specifies the 16-bit enumeration for the Fusing field of the Minefield Data PDU

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Primary	0-6	Identifies the type of the primary fuse 0 - No Fuse 1 - Other 2 - Pressure 3 - Magnetic 4 - Tilt Rod 5 - Command 6 - Trip Wire
Secondary	7-13	Identifies the type of the secondary fuse 0 - No Fuse 1 - Other 2 - Pressure 3 - Magnetic 4 - Tilt Rod 5 - Command 6 - Trip Wire
AHD	14	Describes the anti-handling device status of the mine 0 - No anti-handling device 1 - Anti-handling device
	15	Unused

10.2.4 Sensor Types

This section specifies the 16-bit enumeration for the Sensor Types field of the Minefield Query PDU and the Minefield Data PDU. Bits 0-3 identify the category of the sensor type and bits 4-15 identify the subcategory within the specified category.

<u>Category</u>	<u>Subcategory</u>	
0	Other	
1	Optical	
	0	Unaided Eye, Actively Searching
	1	Unaided Eye, Not Actively Searching
	2	Binoculars
	3	Image Intensifier
	4	HMMWV occupant, Actively Searching
	5	HMMWV occupant, Not Actively Searching
	6	Truck occupant, Actively Searching
	7	Truck occupant, Not Actively Searching
	8	Tracked vehicle occupant, closed hatch, Actively Searching
	9	Tracked vehicle occupant, closed hatch, Not Actively Searching
	10	Tracked vehicle occupant, open hatch, Actively Searching
	11	Tracked vehicle occupant, open hatch, Not Actively Searching
2	FLIR	
	0	Generic 3-5
	1	Generic 8-12
	2	ASTAMIDS I
	3	ASTAMIDS II
	4	GSTAMIDS 3-5
	5	GSTAMIDS 8-12
	6	HSTAMIDS 3-5
	7	HSTAMIDS 8-12
	8	COBRA 3-5
	9	COBRA 8-12
3	RADAR	
	0	Generic
	1	Generic GPR
	2	GSTAMIDS I
	3	GSTAMIDS II
	4	HSTAMIDS I
	5	HSTAMIDS II
4	Magnetic	
	0	Generic
	1	AN-PSS-11
	2	AN-PSS-12
	3	GSTAMIDS

5	Laser	0	Generic
		1	ASTAMIDS
6	SONAR	0	Generic
7	Physical	0	Generic Probe
		1	Probe, metal content
		2	Probe, no metal content
8	Multispectral	0	Generic

10.2.5 Paint Scheme

This section specifies the 8-bit enumeration for the Paint Scheme field of the Minefield Data PDU.

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Algae	0-1	Identifies the algae build-up on the mine 0 - None 1 - Light 2 - Moderate 3 - Heavy
Paint Scheme	2-7	Identifies the paint scheme of the mine 0 - Other 1 - Standard 2 - Camouflage Desert 3 - Camouflage Jungle 4 - Camouflage Snow 5 - Camouflage Gravel 6 - Camouflage Pavement 7 - Camouflage Sand 8 - Natural Wood 9 - Clear 10 - Red 11 - Blue 12 - Green 13 - Olive 14 - White 15 - Tan 16 - Black 17 - Yellow 18 - Brown

10.2.6 Protocol Mode

This section specifies the 2-bit enumeration for the Protocol Mode field of the Minefield State PDU.

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Protocol Mode	0-1	0 - Heartbeat mode 1 - QRP mode

11.0 Entity Management family

11.1 Aggregate State PDU

11.1.1 Aggregate State

This section specifies the 8-bit enumeration for the Aggregate State-field in the Aggregate State PDU.

<u>Field Value</u>	<u>Aggregate State</u>
0	Other
1	Aggregated
2	Disaggregated
3	Fully disaggregated
4	Pseudo-disaggregated
5	Partially-disaggregated

11.1.2 Formation

This section specifies the 32-bit enumeration for the Formation-field in the Aggregate State PDU

<u>Field Value</u>	<u>Formation</u>
0	Other
1	Assembly
2	Vee
3	Wedge
4	Line
5	Column

11.1.3 Aggregate Type record

This section specifies the 64-bit enumerations for the Aggregate Type record of the Aggregate State PDU. Aggregate types are arranged in hierarchical order.

11.1.3.1 Aggregate Kind

This section specifies the 8-bit enumerations for the Aggregate Kind field for the Aggregate Type record.

<u>Field Value</u>	<u>Aggregate Kind</u>
0	Other
1	Military Hierarchy
2	Common Type
3	Common Mission
4	Similar Capabilities
5	Common Location

11.1.3.2 Domain and Country

The Domain-field and the Country-field enumeration are the same as used for the Entity Type record (see 4.2).

11.1.3.3 Aggregate Types

11.1.3.3.1 Kind = US Military Hierarchy

The Category field enumerations for Kind-field = Military Hierarchy specify the Echelon Level of the aggregate, and are enumerated as follows:

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
			0		Other
			1		Individual Vehicle
			2		Element
			3		Platoon
			4		Battery
			5		Company
			6		Battalion
			7		Regiment
			8		Brigade
			9		Division
			10		Corps

The Subcategory field enumerations for Kind field = Military Hierarchy specify the Echelon Type of the aggregate, and are enumerated as follows. Not all of the following echelon types are applicable to each of the above enumerated Categories.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			
					Entries from the above list
			0		Other
			1		Cavalry Troop
			2		Armor
			3		Infantry
			4		Mechanized Infantry
			5		Cavalry
			6		Armored Cavalry
			7		Artillery
			8		Self-propelled Artillery
			9		Close Air Support
			10		Engineer
			11		Air Defense Artillery
			12		Anti-tank
			13		Army Aviation Fixed-wing
			14		Army Aviation Rotary-wing
			15		Army Attack Helicopter
			16		Air Cavalry
			17		Armor Heavy Task Force
			18		Motorized Rifle
			19		Mechanized Heavy Task Force
			20		Command Post

21 CEWI
22 Tank only

The Specific field enumerations for Kind field = Military Hierarchy specify whether the aggregate unit contains a headquarters, and is enumerated as follows.

<u>Kind</u>	<u>Domain</u>	<u>Country</u>	<u>Cat</u>	<u>Scat</u>	<u>Specific</u>
1	1	225			

Entries from the above list

Entries from the above list

0 No headquarters

1 Yes aggregate unit contains a headquarters

11.2 IsPartOf PDU

11.2.1 Nature

This section specifies the 16-bit enumeration for the Nature-field of the Relationship record.

<u>Field Value</u>	<u>Nature</u>
0	Other
1	Host-fireable munition
2	Munition carried as cargo
3	Fuel carried as cargo
4	Gunmount attached to host
5	Computer generated forces carried as cargo
6	Vehicle carried as cargo
7	Emitter mounted on host
8	Mobile command and control entity carried aboard host
9	Entity stationed at (see Position enumerations below) with respect to host
10	Team member in formation with

11.2.2 Position

This section specifies the 16-bit enumeration for the Position-field of the Relationship record.

<u>Field Value</u>	<u>Position</u>
0	Other
1	On top of
2	Inside of

11.2.3 Station Name

This section specifies the 16-bit enumeration for the Station Name-field of the Named Station Identification record.

<u>Field Value</u>	<u>Station Location</u>
0	Other
1	Aircraft wingstation
2	Ship's forward gunmount (starboard)
3	Ship's forward gunmount (port)
4	Ship's forward gunmount (centerline)
5	Ship's aft gunmount (starboard)
6	Ship's aft gunmount (port)
7	Ship's aft gunmount (centerline)
8	Forward torpedo tube
9	Aft torpedo tube
10	Bomb bay
11	Cargo bay
12	Truck bed

13	Trailer bed
14	Well deck
15	On station - (RNG/BRG)
16	On station - (x,y,z)

11.3 IsGroupOf PDU

11.3.1 Grouped Entity Category

This section specifies the 8-bit enumeration for the Grouped Entity Category field of the IsGroupOf PDU.

<u>Field Value</u>	<u>Grouped Entity Category</u>
0	Undefined
1	Basic Ground Combat Vehicle
2	Enhanced Ground Combat Vehicle
3	Basic Ground Combat Soldier
4	Enhanced Ground Combat Soldier
5	Basic Rotor Wing Aircraft
6	Enhanced Rotor Wing Aircraft
7	Basic Fixed Wing Aircraft
8	Enhanced Fixed Wing Aircraft
9	Ground Logistics Vehicle

11.3.2 Rest Status

This section specifies the 8-bit enumeration for the Rest Status field in the Grouped Entity Description record for the Enhanced Ground Combat Soldier.

<u>Field Value</u>	<u>Rest Status</u>
0	Not rested (Has not slept in the last three days)
1	Has slept an average of 1 hour per day in the last three days.
2	Has slept an average of 2 hours per day in the last three days.
3	Has slept an average of 3 hours per day in the last three days.
4	Has slept an average of 4 hours per day in the last three days.
5	Has slept an average of 5 hours per day in the last three days.
6	Has slept an average of 6 hours per day in the last three days.
7	Has slept an average of 7 hours per day in the last three days.
8	Fully rested (Has slept an average of 8 hours per day in the last three days)

11.3.3 Grouped Entity Description records

The specification of the entity state information about various categories of grouped entities within an IsGroupOf PDU shall be represented by a Grouped Entity Description record.

11.3.3.1 Grouped Entity Description record 1 - Basic Ground Combat Vehicle

The specification of entity state information about an individual entity within a group of ground combat vehicles shall be represented by a Grouped Entity Description record 1 - Basic Ground Combat Vehicle. The Grouped Entity Description record 1 shall contain the following fields:

- a) *Entity Identifier*. Each entity within a group shall be assigned an entity identifier unique within that group. The Site Identifier and Application Identifiers shall be the same as those designated in the Group Entity ID field, and shall not be transmitted. The Entity Identifier shall be represented by a 16-bit unsigned integer.

- b) *Entity Location.* Location of a grouped entity shall be specified by a set of three offsets: x-offset, y-offset, and z-offset. These offsets shall be determined by the difference, in meters, of the grouped entity from the Group Reference Point. Each offset shall be represented by a 16-bit signed integer.
- c) *Entity Appearance.* Appearance of a grouped entity shall be identical to that specified by an Entity State PDU Appearance record. This record shall be defined as a 32-bit record of enumerations (see 5.2.12 in IEEE Std 1278.1-1995). Values for the fields contained in this record are defined in Section 4 of this document.
- d) *Entity Orientation.* Orientation of a grouped entity shall be specified by three Euler angles, psi, theta and phi, in 25 milliradian increments. Each angle shall be represented by an 8-bit signed integer.
- e) *Entity Speed.* Speed of a grouped entity shall be the signed magnitude value of the entity's absolute velocity vector. A negative value shall indicate that the entity is moving backwards. Entity Speed shall be specified in meters per second and shall be represented by an 8-bit signed integer.
- f) *Turret Azimuth.* Turret Azimuth shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.
- g) *Gun Elevation.* Gun Elevation shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.
- h) *Turret Slew Rate.* Turret Slew Rate shall be specified in 25 milliradian per second increments, and shall be represented by an 8-bit signed integer.
- i) *Gun Elevation Rate.* Gun Elevation Rate shall be specified in 25 milliradian per second increments, and shall be represented by an 8-bit signed integer.

The format of the Grouped Entity Description record 1 - Basic Ground Combat Vehicle shall be as shown in Figure 11-3-1

Figure 11-3-1—Grouped Entity Description record 1 - Basic Ground Combat Vehicle

Entity ID	16-bit unsigned integer
Entity Location	x-Offset—16-bit signed integer
	y-Offset—16-bit signed integer
	z-Offset—16-bit signed integer
Entity Appearance	32-bit record of enumerations
Entity Orientation	Psi (Ψ)—8-bit signed integer
	Theta (θ)—8-bit signed integer
	Phi (ϕ)—8-bit signed integer
Entity Speed	8-bit signed integer
Turret Azimuth	8-bit signed integer
Gun Elevation	8-bit signed integer
Turret Slew Rate	8-bit signed integer
Gun Elevation Rate	8-bit signed integer
Grouped Entity Description record 1 - total Size = 160 bits	

11.3.3.2 Grouped Entity Description record 2 - Enhanced Ground Combat Vehicle

The specification of entity state and logistics information about an individual entity within a group of ground combat vehicles shall be represented by a Grouped Entity Description record 2 - Enhanced Ground Combat Vehicle. The Grouped Entity Description record 2 shall contain the following fields:

- a) *Grouped Entity Description record 1 - Basic Ground Combat Vehicle.* See 11.3.3.1.
- b) *Fuel Status.* Fuel Status of a grouped entity shall be the amount of fuel remaining. Fuel Status shall be specified in 10 liter increments, and shall be represented by an 8-bit unsigned integer.
- c) *Ground Maintenance Status.* Ground Maintenance Status of a grouped entity shall be the distance traveled since the last failure. Ground Maintenance Status shall be specified in tens of kilometers, and shall be represented by an 8-bit unsigned integer.
- d) *Primary Ammunition.* Primary Ammunition of a grouped entity shall be the amount of primary ammunition remaining. Primary Ammunition shall be specified in natural ammunition units for the primary weapon system, and shall be represented by an 8-bit unsigned integer.
- e) *Secondary Ammunition.* Secondary Ammunition of a grouped entity shall be the amount of secondary ammunition remaining. Secondary Ammunition shall be specified in natural ammunition units for the secondary weapon system, and shall be represented by an 8-bit unsigned integer.

The format of the Grouped Entity Description record 2 - Enhanced Ground Combat Vehicle shall be as shown in Figure 11-3-2.

Figure 11-3-2— Grouped Entity Description record 2 - Enhanced Ground Combat Vehicle

Grouped Entity Description record 1 - Basic Ground Combat Vehicle	
Fuel Status	8-bit unsigned integer
Ground Maintenance Status	8-bit unsigned integer
Primary Ammunition	8-bit unsigned integer
Secondary Ammunition	8-bit unsigned integer
Grouped Entity Description record 2 - total Size = 192 bits	

11.3.3.3 Grouped Entity Description record 3 - Basic Ground Combat Soldier

The specification of entity state information about an individual entity within a group of ground combat soldiers shall be represented by a Grouped Entity Description record 3 - Basic Ground Combat Soldier. The Grouped Entity Description record 3 shall contain the following fields:

- a) *Entity Identifier.* Each entity within a group shall be assigned an entity identifier unique within that group. The Site Identifier and Application Identifiers shall be the same as those designated in the Group Entity ID field, and shall not be transmitted. The Entity Identifier shall be represented by a 16-bit unsigned integer.
- b) *Entity Location.* Location of a grouped entity shall be specified by a set of three offsets: x-offset, y-offset, and z-offset. These offsets shall be determined by the difference, in meters, of the grouped entity from the Group Reference Point. Each offset shall be represented by a 16-bit signed integer.
- c) *Entity Appearance.* Appearance of a grouped entity shall be identical to that specified by an Entity State PDU Appearance record. This record shall be defined as a 32-bit record of enumerations (see 5.2.12 in IEEE Std 1278.1-1995). Values for the fields contained in this record are defined in Section 4 of this document.
- d) *Entity Orientation.* Orientation of a grouped entity shall be specified by three Euler angles, psi, theta and phi, in 25 milliradian increments. Each angle shall be represented by an 8-bit signed integer.
- e) *Entity Speed.* Speed of a grouped entity shall be the signed magnitude value of the entity's absolute velocity vector. A negative value shall indicate that the entity is moving

backwards. Entity Speed shall be specified in meters per second and shall be represented by an 8-bit signed integer.

- f) *Head Azimuth*. Head Azimuth shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.
- g) *Head Elevation*. Head Elevation shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.
- h) *Head Scan Rate*. Head Scan Rate shall be specified in 25 milliradian per second increments, and shall be represented by an 8-bit signed integer.
- i) *Head Elevation Rate*. Head Elevation Rate shall be specified in 25 milliradian per second increments, and shall be represented by an 8-bit signed integer.

The format of the Grouped Entity Description record 3 - Basic Ground Combat Soldier shall be as shown in Figure 11-3-3.

Figure 11-3-3—Grouped Entity Description record 3 - Basic Ground Combat Soldier

Entity ID	16-bit unsigned integer
Entity Location	x-Offset—16-bit signed integer
	y-Offset—16-bit signed integer
	z-Offset—16-bit signed integer
Entity Appearance	32-bit record of enumerations
Entity Orientation	Psi (Ψ)—8-bit signed integer
	Theta (θ)—8-bit signed integer
	Phi (ϕ)—8-bit signed integer
Entity Speed	8-bit signed integer
Head Azimuth	8-bit signed integer
Head Elevation	8-bit signed integer
Head Scan Rate	8-bit signed integer
Head Elevation Rate	8-bit signed integer
Grouped Entity Description record 3 - total Size = 160 bits	

11.3.3.4 Grouped Entity Description record 4 - Enhanced Ground Combat Soldiers

The specification of entity state and logistics information about an individual entity within a group of ground combat soldiers shall be represented by a Grouped Entity Description record 4 - Enhanced Ground Combat Soldier. The Grouped Entity Description record 4 shall contain the following fields:

- a) *Grouped Entity Description record 3 - Basic Ground Combat Soldier*. See 11.3.3.3.
- b) *Water Status*. Water Status of a grouped entity shall be the amount of water on hand. Water Status shall be specified in one ounce increments, and shall be represented by an 8-bit unsigned integer.
- c) *Rest Status*. Rest Status of a grouped entity shall be represented by an 8-bit enumeration (see Section 11.3.2).
- d) *Primary Ammunition*. Primary Ammunition of a grouped entity shall be the amount of primary ammunition remaining. Primary Ammunition shall be specified in natural ammunition units for the primary weapon system, and shall be represented by an 8-bit unsigned integer.
- e) *Secondary Ammunition*. Secondary Ammunition of a grouped entity shall be the amount of secondary ammunition remaining. Secondary Ammunition shall be specified in natural

ammunition units for the secondary weapon system, and shall be represented by an 8-bit unsigned integer.

The format of the Grouped Entity Description record 4 - Enhanced Ground Combat Soldier shall be as shown in Figure 11-3-4.

Figure 11-3-4—Grouped Entity Description record 4 - Enhanced Ground Combat Soldier

Grouped Entity Description record 3 - Basic Ground Combat Soldier	
Water Status	8-bit unsigned integer
Rest Status	8-bit enumeration
Primary Ammunition	8-bit unsigned integer
Secondary Ammunition	8-bit unsigned integer
Grouped Entity Description record 4 - total Size = 192 bits	

11.3.3.5 Grouped Entity Description record 5 - Basic Rotor Wing Aircraft

The specification of entity state information about an individual entity within a group of rotor wing aircraft shall be represented by a Grouped Entity Description record 5 - Basic Rotor Wing Aircraft. The Grouped Entity Description record 5 shall contain the following fields:

- a) *Entity Identifier*. Each entity within a group shall be assigned an entity identifier unique within that group. The Site Identifier and Application Identifiers shall be the same as those designated in the Group Entity ID field, and shall not be transmitted. The Entity Identifier shall be represented by an unsigned 16-bit integer.
- b) *Entity Location*. Location of a grouped entity shall be specified by a set of three offsets: x-offset, y-offset, and z-offset. These offsets shall be determined by the difference, in meters, of the grouped entity from the Group Reference Point. Each offset shall be represented by a 16-bit signed integer.
- c) *Entity Appearance*. Appearance of a grouped entity shall be identical to that specified by an Entity State PDU Appearance record. This record shall be defined as a 32-bit record of enumerations (see 5.2.12 in IEEE Std 1278.1-1995). Values for the fields contained in this record are defined in Section 4 of this document.
- d) *Entity Orientation*. Orientation of a grouped entity shall be specified by three Euler angles, psi, theta and phi, in 25 milliradian increments. Each angle shall be represented by an 8-bit signed integer.
- e) *Fuel Status*. Fuel Status of a grouped entity shall be the amount of primary fuel remaining. Fuel Status shall be specified in natural units of the specific system, and shall be represented by an 8-bit unsigned integer.
- f) *Movement Direction*. Movement Direction shall be specified as a horizontal and a vertical deviation from the Entity Orientation. Each deviation shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.
- g) *Movement Speed*. Speed of a grouped entity shall be the signed magnitude value of the entity's absolute velocity vector. A negative value shall indicate that the entity is moving backwards. Entity Speed shall be specified in 0.1 meter per second increments and shall be represented by a 16-bit signed integer.
- h) *Turret Azimuth*. Turret Azimuth shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.
- i) *Gun Elevation*. Gun Elevation shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.

- j) *Turret Slew Rate.* Turret Slew Rate shall be specified in 25 milliradian per second increments, and shall be represented by an 8-bit signed integer.
- k) *Gun Elevation Rate.* Gun Elevation Rate is to be specified in 25 milliradian per second increments, and shall be represented by an 8-bit signed integer.

The format of the Grouped Entity Description record 5 - Basic Rotor Wing Aircraft shall be as shown in Figure 11-3-5

Figure 11-3-5—Grouped Entity Description record 5 - Basic Rotor Wing Aircraft

Entity ID	Entity -16-bit unsigned integer
Entity Location	x-Offset—16-bit signed integer
	y-Offset—16-bit signed integer
	z-Offset—16-bit signed integer
Entity Appearance	32-bit record of enumerations
Entity Orientation	Psi (Ψ)—8-bit signed integer
	Theta (θ)—8-bit signed integer
	Phi (ϕ)—8-bit signed integer
Fuel Status	8-bit unsigned integer
Movement Direction	Horizontal Deviation—8-bit signed integer
	Vertical Deviation—8-bit signed integer
Movement Speed	16-bit signed integer
Turret Azimuth	8-bit signed integer
Gun Elevation	8-bit signed integer
Turret Slew Rate	8-bit signed integer
Gun Elevation Rate	8-bit signed integer
Grouped Entity Description record 5 - total Size = 192 bits	

11.3.3.6 Grouped Entity Description record 6 - Enhanced Rotary Wing Aircraft.

The specification of entity state and logistics information about an individual entity within a group of rotor wing aircraft shall be represented by a Grouped Entity Description record 6 - Enhanced Rotor Wing Aircraft. The Grouped Entity Description record 6 shall contain the following fields:

- a) *Grouped Entity Description record 5 - Basic Rotor Wing Aircraft.* See 11.3.3.5.
- b) *Supplemental Fuel Status.* Supplemental Fuel Status of a grouped entity shall be the amount of supplemental fuel remaining. Supplemental Fuel Status shall be specified in the natural units of the specific system, and shall be represented by an 8-bit unsigned integer.
- c) *Air Maintenance Status.* Air Maintenance Status of a grouped entity shall be the time since the last maintenance was completed. Air Maintenance Status shall be specified in hours, and shall be represented by an 8-bit unsigned integer.
- d) *Primary Ammunition.* Primary Ammunition of a grouped entity shall be the amount of primary ammunition remaining. Primary Ammunition shall be specified in natural ammunition units for the primary weapon system, and shall be represented by an 8-bit unsigned integer.
- e) *Secondary Ammunition.* Secondary Ammunition of a grouped entity shall be the amount of secondary ammunition remaining. Secondary Ammunition shall be specified in natural ammunition units for the secondary weapon system, and shall be represented by an 8-bit unsigned integer.

The format of the Grouped Entity Description record 6 - Enhanced Rotor Wing Aircraft shall be as shown in Figure 11-3-6.

Figure 11-3-6—Grouped Entity Description record 6 - Enhanced Rotor Wing Aircraft

Grouped Entity Description record 5 - Basic Rotor Wing Aircraft	
Supplemental Fuel Status	8-bit unsigned integer
Air Maintenance Status	8-bit unsigned integer
Primary Ammunition	8-bit unsigned integer
Secondary Ammunition	8-bit unsigned integer
Grouped Entity Description record 6 - total Size = 224 bits	

11.3.3.7 Grouped Entity Description record 7 - Basic Fixed Wing Aircraft.

The specification of entity state information about an individual entity within a group of fixed wing aircraft shall be represented by a Grouped Entity Description record 7 - Basic Fixed Wing Aircraft. The Grouped Entity Description record 7 shall contain the following fields:

- a) *Entity Identifier.* Each entity within a group shall be assigned an entity identifier unique within that group. The Site Identifier and Application Identifiers shall be the same as those designated in the Group Entity ID field, and shall not be transmitted. The Entity Identifier shall be represented by a 16-bit integer.
- b) *Entity Location.* Location of a grouped entity shall be specified by a set of three offsets: x-offset, y-offset, and z-offset. These offsets shall be determined by the difference, in meters, of the grouped entity from the Group Reference Point. Each offset shall be represented by a 16-bit signed integer.
- c) *Entity Appearance.* Appearance of a grouped entity shall be identical to that specified by an Entity State PDU Appearance record. This record shall be defined as a 32-bit record of enumerations (see 5.2.12 in IEEE Std 1278.1-1995). Values for the fields contained in this record are defined in Section 4 of this document.
- d) *Entity Orientation.* Orientation of a grouped entity shall be specified by three Euler angles, psi, theta and phi, in 25 milliradian increments. Each angle shall be represented by an 8-bit signed integer.
- e) *Fuel Status.* Fuel Status of a grouped entity shall be the amount of primary fuel remaining. Fuel Status shall be specified in natural units of the specific system, and shall be represented by an 8-bit unsigned integer.
- f) *Movement Direction.* Movement Direction shall be specified as a horizontal and a vertical deviation from the Entity Orientation. Each deviation shall be specified in 25 milliradian increments, and shall be represented by an 8-bit signed integer.
- g) *Movement Speed.* Speed of a grouped entity shall be a signed magnitude value of the entity's absolute velocity vector. A negative value shall indicate that the entity is moving backwards. Movement Speed shall be specified in 0.1 meter per second increments, and shall be represented by a 16-bit signed integer.

The format of the Grouped Entity Description record 7 - Basic Fixed Wing Aircraft shall be as shown in Figure 11-3-7.

Figure 11-3-7—Grouped Entity Description record 7 - Basic Fixed Wing Aircraft

Entity ID	Entity -16-bit unsigned integer
	x-Offset—16-bit signed integer

Entity Location	y-Offset—16-bit signed integer
	z-Offset—16-bit signed integer
Entity Appearance	32-bit record of enumerations
Entity Orientation	Psi (Ψ)—8-bit signed integer
	Theta (θ)—8-bit signed integer
	Phi (ϕ)—8-bit signed integer
Fuel Status	8-bit unsigned integer
Movement Direction	Horizontal Deviation—8-bit signed integer
	Vertical Deviation—8-bit signed integer
Movement Speed	16 bit signed integer
Grouped Entity Description record 7 - total Size = 160 bits	

11.3.3.8 Grouped Entity Description record 8 - Enhanced Fixed Wing Aircraft

The specification of entity state and logistics information about an individual entity within a group of fixed wing aircraft shall be represented by a Grouped Entity Description record 8 - Enhanced Fixed Wing Aircraft. Grouped Entity Description record 8 shall contain the following fields:

- a) *Grouped Entity Description record 7 - Basic Fixed Wing Aircraft.* See 11.3.3.7.
- b) *Supplemental Fuel Status.* Supplemental Fuel Status of a grouped entity shall be the amount of supplemental fuel remaining. Supplemental Fuel Status shall be specified in the natural units of the specific system, and shall be represented by an 8-bit unsigned integer.
- c) *Air Maintenance Status.* Air Maintenance Status of a grouped entity shall be the time since the last maintenance was completed. Air Maintenance Status shall be specified in hours, and shall be represented by an 8-bit unsigned integer.
- d) *Primary Ammunition.* Primary Ammunition of a grouped entity shall be the amount of primary ammunition remaining. Primary Ammunition shall be specified in natural ammunition units for the primary weapon system, and shall be represented by an 8-bit unsigned integer.
- e) *Secondary Ammunition.* Secondary Ammunition of a grouped entity shall be the amount of secondary ammunition remaining. Secondary Ammunition shall be specified in natural ammunition units for the secondary weapon system, and shall be represented by an 8-bit unsigned integer.

The format of the Grouped Entity Description record 8 - Enhanced Fixed Wing Aircraft shall be as shown in Figure 11-3-8.

Figure 11-3-8—Grouped Entity Description record 8 - Enhanced Fixed Wing Aircraft.

Grouped Entity Description record 7 - Basic Fixed Wing Aircraft	
Supplemental Fuel Status	8-bit unsigned integer
Air Maintenance Status	8-bit unsigned integer
Primary Ammunition	8-bit unsigned integer
Secondary Ammunition	8-bit unsigned integer
Grouped Entity Description record 8 - total Size = 192 bits	

11.3.3.9 Grouped Entity Description record 9 - Ground Logistics Vehicle.

The specification of entity state information about an individual entity within a group of ground logistics vehicles shall be represented by a Grouped Entity Description record 9 - Ground Logistics Vehicle. The Grouped Entity Description record 9 shall contain the following fields:

- a) *Entity Identifier.* Each entity within a group shall be assigned an entity identifier unique within that group. The Site Identifier and Application Identifiers shall be the same as those designated in the Group Entity ID, and shall not be transmitted. The Entity Identifier shall be represented by a 16-bit integer.
- b) *Entity Location.* Location of a grouped entity shall be specified by a set of three offsets: x-offset, y-offset, and z-offset. These offsets shall be determined by the difference, in meters, of the grouped entity from the Group Reference Point. Each offset shall be represented by a 16-bit signed integer.
- c) *Entity Appearance.* Entity Appearance of a grouped entity shall be identical to that specified by an Entity State PDU Appearance record. This record shall be defined as a 32-bit record of enumerations (see 5.2.12 in IEEE Std 1278.1-1995). Values for the fields contained in this record are defined in Section 4 of this document.
- d) *Entity Orientation.* Orientation of a grouped entity shall be specified by three Euler angles, psi, theta and phi, in 25 milliradian increments. Each angle shall be represented by an 8-bit signed integer.
- e) *Entity Speed.* Speed of a grouped entity shall be the signed magnitude value of the entity's absolute velocity vector. A negative value shall indicate that the entity is moving backwards. Entity Speed shall be specified in meters per second, and shall be represented by an 8-bit signed integer.

The format of the Grouped Entity Description record 9 - Ground Logistics Vehicle shall be as shown in Figure 11-3-9.

Figure 11-3-9—Grouped Entity Description record 9 - Ground Logistics Vehicle

Entity ID	Entity -16-bit unsigned integer
Entity Location	x-Offset—16-bit signed integer
	y-Offset—16-bit signed integer
	z-Offset—16-bit signed integer
Entity Appearance	32-bit record of enumerations
Entity Orientation	Psi (Ψ)—8-bit signed integer
	Theta (θ)—8-bit signed integer
	Phi (ϕ)—8-bit signed integer
Entity Speed	8-bit signed integer
Grouped Entity Description record 9 Total Size = 128 bits	

11.4 Transfer Control PDU

11.4.1 Transfer Type

This section specifies the 8-bit enumeration for the Transfer Type field of the Transfer Control PDU.

<u>Field Value</u>	<u>Nature</u>
0	Other
1	Controlling application requests transfer of an entity
2	Application desiring control requests transfer of an entity
3	Mutual exchange / swap of an entity
4	Controlling application requests transfer of an environmental process
5	Application desiring controls requests transfer of an environmental process
6	Mutual exchange / swap of an environmental

12.0 Environment family

12.1 Point, Linear, Areal Object State PDU

12.1.1 Object Type record

This section specifies the 32-bit enumerations for the Object Type record of the Point Object, Linear Object and Areal Object State PDUs. Object Types are arranged in a hierarchical order.

12.1.1.1 Domain

The domain enumerations are the same as used for the Entity Type record (see Section 4.2).

12.1.1.2 Object Kind

This section specifies the 8-bit enumeration for the Object Kind field.

<u>Field Value</u>	<u>Object Kind</u>
0	Other
1	Obstacle
2	Prepared position
3	Cultural feature
4	Passageway
5	Tactical smoke
6	Obstacle marker
7	Obstacle breach

12.1.1.3 Point Object State PDU Object Types

<u>Domain</u>	<u>Object Kind</u>	<u>Cat</u>	<u>Scat</u>
0	5	0	Other
		1	Ground burst
		0	Other
		1	Artillery
		2	Air burst
		0	Other
		1	Grenade
1	1	0	Other
		1	Abatis
		0	Other
		1	8 tree
		2	14 tree

<u>Domain</u>	<u>Object Kind</u>	<u>Cat</u>	<u>Scat</u>
		2	Log Crib <ul style="list-style-type: none"> 0 Other 1 Rectangular 2 Triangular
		3	Crater <ul style="list-style-type: none"> 0 Other 1 Small 2 Medium 3 Large
1	2	0	Other
		1	Vehicle defilade <ul style="list-style-type: none"> 0 Other 1 Armored vehicle 2 Fighting vehicle 3 Mortar carrier 4 Tank
		2	Infantry fighting position <ul style="list-style-type: none"> 0 Other 1 Covered machine gun bunker 2 Overhead covered infantry position 3 Non-covered infantry position 4 Non-covered machine gun bunker 5 Hasty fighting position
1	3	0	Other
		1	Building / structure <ul style="list-style-type: none"> 0 Other 1 Church 2 Apartment building 3 Government building 4 Industrial building 5 Hanger 6 Microwave tower 7 Power pylon 8 Radio / TV tower 9 School 10 Transformer yard
		2	Building rubble <ul style="list-style-type: none"> 0 Other

<u>Domain</u>	<u>Object Kind</u>	<u>Cat</u>	<u>Scat</u>
1	4	0	Other
		1	Stationary bridge
		0	Other
		1	2-lane
		2	4-lane
		2	AVLB
		0	Other
		1	M60A1
		2	MTU20
		3	Ribbon bridge
		0	Other
		1	2-lane
		2	4-lane

12.1.1.4 Linear Object State PDU Object Types

<u>Domain</u>	<u>Object Kind</u>	<u>Cat</u>	<u>Scat</u>
0	5	0	Other
		1	Exhaust smoke
		0	Other
1	1	0	Other
		1	Tank ditch
		0	Other
		2	Concertina wire
		0	Other
		1	2-roll
		2	3-roll
1	6	0	Other
		1	Minefield lane marker
		0	Other
1	7	0	Other
		1	Breach
		0	Other

12.1.1.5 Areal Object State PDU Object Types

<u>Domain</u>	<u>Object Kind</u>	<u>Cat</u>	<u>Scat</u>
0	1	0 Other	
		1 Minefield	
		0 Other	
		1 Hasty	
		2 Prepared	
		3 Scattered	
		4 Solitary	

12.1.2 Appearance record

This section specifies the 48-bit enumeration for the Appearance record of the Point Object, Linear Object, and Areal Object State PDUs. This field consists of a general part comprising the lower 16 bits, and a PDU specific portion comprising the remaining 32 bits.

12.1.2.1 General

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
% complete	0-7	8-bit unsigned integer indicating the percent completion of the object (0..100)
Damage	8-9	Describes the damaged appearance of the object 0 No damage 1 Damaged 2 Destroyed
Predistributed	10	Describes whether the object was predistributed 0 Object created during the exercise 1 Object predistributed prior to exercise start
State	11	Describes the state of the object 0 Active 1 Deactivated
Smoking	12	Describes whether smoke is rising from an object 0 None 1 Smoke present
Flaming	13	Describes whether flames are rising from an object 0 None 1 Flames present
Unused	14-15	0

12.1.2.2 Point Object State PDU Appearance Records

The upper 32 bits of the Point Object Appearance field are defined specifically for each category. The following sections describe the specific bit definitions for all categories.

12.1.2.2.1 Building / structure, Building rubble, Stationary bridge, and AVLB

The upper 32 bits of the Point Object Appearance field for categories Building / structure, Building rubble, Stationary bridge, and AVLB are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Unused	16-47	0

12.1.2.2.2 Log crib, Abatis, Vehicle defilade, and Infantry fighting position

The upper 32 bits of the Point Object Appearance field for the categories Log crib, Abatis, Vehicle defilade, and Infantry fighting position are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Breach	16-17	Describes the breached appearance of the object 0 No breaching 1 Breached 2 Cleared
Unused	18-31	0

12.1.2.2.3 Air burst, Ground burst

The upper 32 bits of the Point Object Appearance field for the categories Air burst and Ground burst are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Opacity	16-23	8-bit unsigned integer indicating the percent opacity of the smoke, ranging from 0% opacity to 100% opacity
Size	24-31	8-bit unsigned integer indicating the radius of the cylinder which approximates an individual burst. The Point Object Location field indicates the center of the bottom of the cylinder for individual bursts. For multiple bursts, the center bottom of each cylinder is calculated based on the model used to represent the multiple bursts.
Height	32-39	8-bit unsigned integer indicating the height of the cylinder which approximates an individual burst. The Point Object Location field indicates the center of

the bottom of the cylinder for individual bursts. For multiple bursts, the center bottom of each cylinder is calculated based on the model used to represent the multiple bursts

Num. of Bursts	40-45	6-bit unsigned integer indicating the number of bursts in the instance of tactical smoke
Chemical	46-47	Describes the chemical content of the smoke 0 Other 1 Hydrochloric 2 White phosphorous 3 Red phosphorous

12.1.2.2.4 Crater

The upper 32 bits of the Point Object Appearance field for the category Crater are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Size	16-23	8-bit unsigned integer indicating the diameter of the crater, where the center of the crater is at the Point Object Location
Unused	24-47	0

12.1.2.2.5 Ribbon Bridge

The upper 32 bits of the Point Object Appearance field for the category Ribbon bridge are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Num. of Segments	16-23	8-bit unsigned integer indicating the number of segments composing the ribbon bridge
Unused	24-47	0

12.1.2.3 Linear Object State PDU Appearance Records

The upper 32 bits of the Linear Object Appearance field are defined specifically for each category. The following sections describe the specific bit definitions for all categories.

12.1.2.3.1 Tank ditch, and Concertina Wire

The upper 32 bits of the Linear Object Appearance field for the categories Tank ditch and Concertina wire are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Breach	16-17	Describes the breached appearance of the object 0 No breaching 1 Slight breaching 2 Moderate breaching 3 Cleared
Unused	18-31	0
Breach Length	32-39	8-bit unsigned integer indicating the fixed length of a breached segment. The 8 bits which follow indicate whether a segment of length = Breach Length is breached or not.
Breach Location	40-47	Each bit indicates whether its associated segment is breached or not. Bit 40+i indicates whether the portion of the segment beginning at the segment origin + (i*Breach Length) and extending i* Breach Length meters is breached or not. For each bit 0 Associated portion of segment is not breached 1 Associated portion of segment is breached

12.1.2.3.2 Exhaust smoke

The upper 32 bits of the Linear Object Appearance field for the category Exhaust smoke are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Opacity	16-23	8-bit unsigned integer indicating the percent opacity of the smoke, ranging from 0% opacity to 100% opacity
Attached	24	Describes whether the smoke is attached to the vehicle 0 Not attached 1 Attached
Chemical	25-26	Describes the chemical content of the smoke 0 Other 1 Hydrochloric 2 White phosphorous 3 Red phosphorous
Unused	27-47	0

12.1.2.3.3 Minefield Lane Marker

The upper 32 bits of the Linear Object Appearance field for the category Minefield lane marker are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Visible Side	16-17	Describes the side of the lane marker which is visible. 0 Left side is visible 1 Right side is visible 2 Both sides are visible
Unused	18-47	0

12.1.2.3.4 Breach

The upper 32 bits of the Linear Object Appearance field for the category Breach are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Unused	16-47	0

12.1.2.4 Areal Object State PDU Appearance Records

The upper 32 bits of the Areal Object Appearance field are defined specifically for each category. The following sections describe the specific bit definitions for all categories.

12.1.2.4.1 Minefield

The upper 32 bits of the Areal Object Appearance field for the category Minefield are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Breach	16-17	Describes the breached appearance of the object 0 No breaching 1 Breached 2 Cleared
Unused	18-30	0
Mine Count	31-47	16-bit unsigned integer indicating the number of mines in the minefield

12.1.3 Modification field

12.1.3.1 Point Object State PDU Modification Field

This section specifies the 8-bit enumerations for the Modification field of the Point Object State PDU. The bits are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Location	0	Describes whether the point object location has been modified since the last update number. 0 Location has not been modified 1 Location has been modified
Orientation	1	Describes whether the point object orientation has been modified since the last update number. 0 Orientation has not been modified 1 Orientation has been modified
Unused	2-7	0

12.1.3.2 Linear Object State PDU Modification Field

This section specifies the 8-bit enumerations for the Segment Modification field of the Linear Segment Parameter record of the Linear Object State PDU. The bits are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Location	0	Describes whether the location of the linear segment has been modified since the last update number. 0 Location has not been modified 1 Location has been modified
Orientation	1	Describes whether the orientation of the linear segment has been modified since the last update number. 0 Orientation has not been modified 1 Orientation has been modified
Unused	2-7	0

12.1.3.3 Areal Object State PDU Modification Field

This section specifies the 8-bit enumerations for the Modification field of the Areal Object State PDU. The bits are defined as follows:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Location	0	Describes whether any locations of the areal object have been modified since the last update number. 0 No locations have been modified 1 Locations have been modified

Unused 1-7 0

12.2 Gridded Data PDU

12.2.1 Field Number

This section specifies the 16-bit enumeration for the Field Number field of the Grid Data Record.

<u>Field Value</u>	<u>Field Number</u>
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12.2.2 Coordinate System

This section specifies the 16-bit enumeration for the Coordinate System field of the Grid Data Record.

<u>Field Value</u>	<u>Coordinate System</u>
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12.2.3 Constant Grid

This section specifies the 8-bit enumeration for the Constant Grid field of the Grid Data Record.

<u>Field Value</u>	<u>Constant Grid</u>
0	Constant grid
1	Updated grid

12.2.4 Sample Type

This section specifies the 16-bit enumeration for the Sample Type field of the Grid Data Record.

<u>Field Value</u>	<u>Sample Type</u>
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12.2.5 Data Representation

This section specifies the 16-bit enumeration for the Data Representation field of the Grid Data Record.

<u>Field Value</u>	<u>Data Representation</u>
0	Type 0
1	Type 1
2	Type 2

12.3 Environmental Process PDU

12.3.1 Model Type

This section specifies the 8-bit enumeration for the Model Type field.

<u>Field Value</u>	<u>Model Type</u>
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12.3.2 Environment Status

This section specifies the 8-bit Boolean array for the Environment Status. Any individual bit set to one indicates that the Environmental Process has the corresponding status.

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
Last	0	Indicates that the current PDU shall be the last PDU for the specified process
On	1	Indicates that the specified environmental process is active

12.3.3 Type

This section specifies the 32-bit enumerations for the Type field of the Environment record for both the Geometry and State records.

12.3.3.1 Type field values for Geometry record

<u>Field Value</u>	<u>Type</u>
000A0000(H)	Point Record 1
0A000000(H)	Point Record 2
000C0000(H)	Line Record 1
0C000000(H)	Line Record 2
00010000(H)	Bounding Sphere Record
000D0000(H)	Sphere Record 1
0D000000(H)	Sphere Record 2
00100000(H)	Ellipsoid Record 1
10000000(H)	Ellipsoid Record 2
00300000(H)	Cone Record 1
30000000(H)	Cone Record 2
00050000(H)	Uniform Geometry Record
00500000(H)	Rectangular Volume Record 1
50000000(H)	Rectangular Volume Record 2
60000000(H)	Gaussian Plume Record
70000000(H)	Gaussian Puff Record

12.3.3.2 Type field values for State record

<u>Field Value</u>	<u>Type</u>
00000100(H)	COMBIC State
00000103(H)	Flare State

12.3.4 Geometry record

This section contains the definition of the Geometry records of the Environment record.

12.3.4.1 Point Record 1

Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point

12.3.4.2 Point Record 2

Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point

12.3.4.3 Line Record 1

Start Point Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
End Point Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point

12.3.4.4 Line Record 2

Start Point Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
End Point Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Start Point Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point
End Point Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point

	z-component - 32 bit floating point
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12.3.4.5 Bounding Sphere Record

Centroid Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Radius	32 bit floating point

12.3.4.6 Sphere Record 1

Centroid Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Radius	32 bit floating point

12.3.4.7 Sphere Record 2

Centroid Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Radius	32 bit floating point
d(Radius)/dt	32 bit floating point
Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point
Angular Velocity	About x-axis - 32 bit floating point
	About y-axis - 32 bit floating point
	About z-axis - 32 bit floating point

12.3.4.8 Ellipsoid Record 1

Centroid Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Sigma X	32 bit floating point
Sigma Y	32 bit floating point
Sigma Z	32 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point

12.3.4.9 Ellipsoid Record 2

Centroid Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Sigma X	32 bit floating point
Sigma Y	32 bit floating point
Sigma Z	32 bit floating point
d(Sigma X)/dt	32 bit floating point
d(Sigma Y)/dt	32 bit floating point
d(Sigma Z)/dt	32 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point
Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point
Angular Velocity	About x-axis - 32 bit floating point
	About y-axis - 32 bit floating point
	About z-axis - 32 bit floating point

12.3.4.10 Cone Record 1

Vertex Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point
Height	32 bit floating point
Peak Angle	32 bit floating point

12.3.4.11 Cone Record 2

Vertex Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point
Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point
Angular Velocity	About x-axis - 32 bit floating point
	About y-axis - 32 bit floating point
	About z-axis - 32 bit floating point
Height	32 bit floating point
d(Height)/dt	32 bit floating point
Peak Angle	32 bit floating point
d(Peak Angle)/dt	32 bit floating point

12.3.4.12 Rectangular Volume Record 1

Corner Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Length X	32 bit floating point
Length Y	32 bit floating point
Length Z	32 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point

12.3.4.13 Rectangular Volume Record 2

Corner Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Length X	32 bit floating point
Length Y	32 bit floating point
Length Z	32 bit floating point
d(Length X)/dt	32 bit floating point
d(Length Y)/dt	32 bit floating point
d(Length Z)/dt	32 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point
Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point
Angular Velocity	About x-axis - 32 bit floating point
	About y-axis - 32 bit floating point
	About z-axis - 32 bit floating point

12.3.4.14 Gaussian Plume Record

Source Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point
Plume Length	32 bit floating point
Plume Width	32 bit floating point
Plume Height	32 bit floating point
d(Plume Length)/dt	32 bit floating point
d(Plume Width)/dt	32 bit floating point
d(Plume Height)/dt	32 bit floating point
Leading Edge	32 bit floating point

Centroid Height	
Leading Edge Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point

12.3.4.15 Gaussian Puff Record

Puff Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Origination Location	x-component - 64 bit floating point
	y-component - 64 bit floating point
	z-component - 64 bit floating point
Sigma X	32 bit floating point
Sigma Y	32 bit floating point
Sigma Z	32 bit floating point
d(Sigma X)/dt	32 bit floating point
d(Sigma Y)/dt	32 bit floating point
d(Sigma Z)/dt	32 bit floating point
Orientation	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point
Velocity	x-component - 32 bit floating point
	y-component - 32 bit floating point
	z-component - 32 bit floating point
Angular Velocity	About x-axis - 32 bit floating point
	About y-axis - 32 bit floating point
	About z-axis - 32 bit floating point
Centroid Height	32 bit floating point

12.3.4.16 Uniform Geometry Record

Field 1 = 0	8 bit unsigned integer
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12.3.5 State record

This section contains the definition of the State records of the Environment record.

12.3.5.1 COMBIC State

Time Since Creation	32 bit unsigned integer
Munition Source	Entity Kind - 8 bit enumeration
	Domain - 8 bit enumeration
	Country - 16 bit enumeration
	Category - 8 bit enumeration
	Subcategory - 8 bit enumeration
	Specific - 8 bit enumeration

	Extra - 8 bit enumeration
Number of Sources	32 bit integer
Geometry Index	16 bit unsigned integer
Source Type	32 bit unsigned integer
Barrage Rate	32 bit floating point
Barrage Duration	32 bit floating point
Barrage Crosswind Length	32 bit floating point
Barrage Downwind Length	32 bit floating point
Detonation Velocity	Psi - 32 bit floating point
	Theta - 32 bit floating point
	Phi - 32 bit floating point

12.3.5.2 Flare State

Time Since Creation	32 bit unsigned integer
Source	Entity Kind - 8 bit enumeration
	Domain - 8 bit enumeration
	Country - 16bit enumeration
	Category - 8 bit enumeration
	Subcategory - 8 bit enumeration
	Specific - 8 bit enumeration
	Extra - 8 bit enumeration
Number Intensity	32 bit integer
Number of Sources	32 bit integer
Geometry Index	16 bit unsigned integer

13.0 Live Entity

13.1 Sub protocol Number

This field specifies the 8-bit enumeration for the Sub-protocol Number field of the Live Entity PDU header record.

<u>Field Value</u>	<u>Sub-protocol Number</u>
0	Sub-protocol as specified in IEEE Std 1278.1a-1998

13.2 Appearance fields

This section specifies the 32-bit enumerations for the four Appearance Fields in the Live Entity Protocol Appearance PDU.

13.2.1 Appearance - Visual

The bits of the Appearance - Visual field are the are the same as specified in section 4.3.1.1.

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 31	Unused

13.2.2 Appearance - IR

The bits of the Appearance - IR field for live entities are defined as follow:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 31	Unused

13.2.3 Appearance - EM

The bits of the Appearance - EM field for live entities are defined as follow:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 31	Unused

13.2.4 Appearance - Audio

The bits of the Appearance - Audio field for live entities are defined as follow:

<u>Name</u>	<u>Bits</u>	<u>Purpose</u>
	0 - 31	Unused