	A	B	C	D	E	F	G	H	I
1	**Registry of General-Purpose Primitive Elements Developed**					394	266	Max & min Class Code this section	
2								(See below for program-specific primitive data entities)	
3	Date of Approval for use	Date of Withdrawal fom use	Class Code, decimal value	Class Code, hex value	Class Code Descriptor (For registry sorting convenience; not required for file format)	Descr Char cnt	Primitive size, bytes	Description	Decimal number of 1st reference primitive whose format defines this primitive
4									
5	20-Feb-2004		266	10A	AIMPOINT ALPHA MAX	18	2	Maximum allowable positive angle of attack, in pitch plane	241
6	20-Feb-2004		267	10B	AIMPOINT ALPHA MIN	18	2	Maximum allowable negative angle of attack, in pitch plane	241
7	20-Feb-2004		268	10C	AIMPOINT BETA MAX	17	2	Maximum allowable positive angle of attack, in yaw plane	241
8	20-Feb-2004		269	10D	AIMPOINT BETA MIN	17	2	Maximum allowable negative angle of attack, in yaw plane	241
9	20-Feb-2004		270	10E	AIMPOINT IMPCT VEL MN	21	2	Impact velocity, minimum limit	24
10	20-Feb-2004		271	10F	AIMPOINT IMPCT VEL MX	21	2	Impact velocity, maximum limit	25
11	20-Feb-2004		272	110	AIMPOINT PITCH	14	2	Pitch, per MIL STD 1760	66
12	20-Feb-2004		273	111	AIMPOINT ROLL	13	2	Roll per MIL STD 1760	67
13	20-Feb-2004		274	112	AIMPOINT YAW	12	2	Yaw per MIL STD 1760	68
14	20-Feb-2004		275	113	AIMPOINT LAT	12	4	Latitude	100
15	20-Feb-2004		276	114	AIMPOINT LONG	13	4	Longitude	101
16	20-Feb-2004		277	115	AIMPOINT GEO EL ELPSD	21	4	Geodetic distance (altitude/elevation) above WGS-84 ellipsoid	102
17									
18	17-Mar-2004		318	13E	BUS SUBADDR	11	2	MIL-STD-1760 Subaddress (message number) used in MSN LEGACY TD BLOCK concatenated to support receiving platform reconstruction of TD message.	249
19									
20	25-May-2007		329	149	CONFIG USER FILE ID	19	2	User identification number for a file	249
21	25-May-2007		335	14F	CONFIG LEGACY 22T HEADER	24	2	Used by carriage system to compare to response of subordinate store	297
22	5-Nov-2008		336	150	CONFIG LASER CODE DIGIT	23	1	One digit of a laser code: 0=No data, 1-8=laser code digit value; 9-255 reserved	324
23	5-Nov-2008		337	151	CONFIG LASER CODE TYPE	22	1	Laser code type: 0=No Data, 1=US PRF, 2=US Short PIM; 3=reserved, 4=US Long PIM, 5=NATO STANAG 3733, 6-255=reserved (Note: "US" codes defined in MICOM Tech Rpt CR-RD-MG-97-2)	324
24	23-Jan-2009		338	152	CONFIG LASER PULSE LOGIC	24	1	bit 0(msb):0/1=valid/invalid data, bit 1:0/1=Accept/Reject Long Pulse, bit 2:0/1=Guide to First/Last Pulse, bits 3-7(lsb)=Reserved	339
25	23-Dec-2009		372	174	CONFIG LINK INIT DIRECTN	24	1	Direction of communications for which data applies. 0=not applicable, 1=command link (received by weapon), 2=back link (transmitted by weapon), 3=bidirectional (transmitted and received by weapon), 4-255=reserved	324
26									
27	20-Feb-2004		278	116	GENERAL ACCEL D	15	4	Acceleration vector, down component (WGS-84, local vertical)	239
28	20-Feb-2004		279	117	GENERAL ACCEL E	15	4	Acceleration vector, east component (WGS-84, local vertical)	239
29	20-Feb-2004		280	118	GENERAL ACCEL N	15	4	Acceleration vector, north component (WGS-84, local vertical)	239
30	20-Feb-2004		281	119	GENERAL ACCEL TOT	17	4	Acceleration vector, scalar component	239
31	20-Feb-2004		282	11A	GENERAL DIST D	14	4	Distance vector from defined point; down component (WGS-84, local vertical)	233
32	20-Feb-2004		283	11B	GENERAL DIST E	14	4	Distance vector from defined point; east component (WGS-84, local vertical)	233
33	20-Feb-2004		284	11C	GENERAL DIST N	14	4	Distance vector from defined point; north component (WGS-84, local vertical)	233
34	20-Feb-2004		285	11D	GENERAL DIST SLANT	18	4	Distance from defined point; scalar	233
35	20-Feb-2004		286	11E	GENERAL SPEED	13	4	Velocity vector, scalar component	237
36	20-Feb-2004		287	11F	GENERAL SPEED MAX	17	4	Upper limit on speed	237
37	20-Feb-2004		288	120	GENERAL SPEED MIN	17	4	Lower limit on speed	237
38	20-Feb-2004		289	121	GENERAL VEL D	13	4	Velocity vector, down component (WGS-84, local vertical)	237
39	20-Feb-2004		290	122	GENERAL VEL E	13	4	Velocity vector, east component (WGS-84, local vertical)	237

	A	B	C	D	E	F	G	H	I
40	20-Feb-2004		291	123	GENERAL VEL N	13	4	Velocity vector, north component (WGS-84, local vertical)	237
41	20-Feb-2004		292	124	GENERAL USEC	12	2	Time in microseconds, unsigned integer	249
42	20-Feb-2004		294	126	GENERAL AZIMANGLE	17	2	Azimuth angle, relative to true north, positive clockwise	241
43	20-Feb-2004		295	127	GENERAL ELEVANGLE	17	2	Elevation angle, relative to forward at local level, positive downward	241
44	20-Feb-2004		296	128	GENERAL SPEEDCOARSE	19	2	Airspeed, scalar, coarse (1/4 m/s resolution)	237
45	20-Feb-2004		297	129	GENERAL DATA WORD	17	2	16-bit data, undefined	
46	20-Feb-2004		310	136	GENERAL PACKED BYTES	20	2	Two elements of 8-bit data, undefined	
47	20-Feb-2004		311	137	GENERAL PACK ASCII	18	2	Two 6-bit or 7-bit ASCII Characters, each right-justified in a byte-sized field	
48	19-Oct-2010		376	178	GENERAL ASCII CHARACTER	23	1	ASCII Character per ANSI X3.4, right-justified in a byte-sized field	
49	17-Apr-2005		319	13F	GENERAL DIST HORIZ	18	4	Scalar distance in a local horizontal plane	233
50	26-Nov-2006		327	147	GENERAL PACKED BCD	18	1	Contains two binary-coded decimal digit values; hex values A-F not allowed	
51	26-Nov-2006		324	144	GEN 8-BIT UNSIGND INTGR	23	1	8-bit unsigned integer, general purpose	
52	5-Nov-2008		339	153	GENERAL 8-BIT DATA	18	1	8 bits of data, undefined	
53	23-Dec-2009		340	154	GEN PACKED HEXADECIMAL	22	1	Two hexadecimal digits packed in an 8-bit field	
54	23-Dec-2009		361	169	GEN 16-BIT UNSIGND INTGR	24	2	16-bit unsigned integer, general purpose; range = 0 to 65,535 decimal	
55	23-Dec-2009		363	16B	GEN 32-BIT DATA	15	4	32-bit string of data, format undefined	
56	23-Dec-2009		364	16C	GEN 32-BIT BOOLEAN MASK	23	4	Mask to be Boolean ANDed (at the bit level) with 32-bit data entities; 1=retain bit value, 0=set bit to zero	**363**
57	31-Jan-2011		389	185	GENERAL DIST SCIENTIFIC	23	2	Mantissa: millimeters, 13 bits, 2's complement, -4096 to 4095 mm; Exponent: 3-bit integer, base 8 (8^n); multiplies mantissa by factor of 1 to decimal 2097152). Maximum range is approx +/- 8590 km	
58	31-Jan-2011		390	186	GENERAL DATA SIZE BITS	22	2	Number of valid bits (MSB-justified, starting at Bit 0) within the following n-bit general data primitive (e.g., Class Codes (decimal) 339, 297, 363). Value shall be less than the size in bits of following data element.	361
59									
60	20-Feb-2004		298	12A	TARGET CE90 HORIZ	17	2	Horizontal error estimate, 90% probability, scalar, of target coordinates	236
61	20-Feb-2004		299	12B	TARGET CEP HORIZ	16	2	Horizontal error estimate, 50% probability, scalar, of target coordinates	236
62	20-Feb-2004		300	12C	TARGET LE90 VERT	16	2	Vertical error estimate, 90% probability, scalar, of target coordinates	236
63	20-Feb-2004		301	12D	TARGET LEP VERT	15	2	Vertical error estimate, 50% probability, scalar, of target coordinates	236
64	20-Feb-2004		302	12E	TARGET MAJ AXIS AZ	18	2	Azimuth of major error, WGS-84 local true north	241
65	2-Mar-2011		303	12F	TARGET MAJ AXIS ER9	19	2	90% probability target position error radius estimate along major axis of ellipse	236
66	2-Mar-2011		304	130	TARGET MIN AXIS ER9	19	2	90% probability target position error radius estimate along minor axis of ellipse	236
67	28-Oct-2005		305	131	TARGET SIGNIF BITS	18	2	Position of least significant bit (0-31) in lat, long & el, formatted as three concatenated 5-bit unsigned binary fields. For two-dimensional coordinates, the values in elevation (b11-b15) are 'don't care'.	
68	20-Feb-2004		306	132	TARGET TRACK NUM	16	4	Formatted per Link 16, to tie MiDEF file's target to other C2 messages in Link 16	
69	28-Oct-2005		321	141	TARGET 1SIGMA HORIZ	19	2	Horizontal error estimate, radius, one sigma probability of target coordinates	236
70	17-Apr-2005		322	142	TARGET 1SIGMA VERT	18	2	Vertical error estimate, one sigma probability of target coordinates	236
71	17-Apr-2005		323	143	TARGET HEIGHT	13	2	Target object vertical dimension	236
72	26-Nov-2006		326	146	TARGET MISSION NUMBER	21	1	Mission number within current data set	324
73	27-Nov-2006		328	148	TARGET LASER CODE	17	2	Laser code; BCD values of 4 LGB switch wheels; values 0, 9-F prohibited; 3 lowest switches are PRF/PIM code	327
74	19-Jul-2011		394	18A	TARGET JDPI	11	5	36-bit ID number (Joint Designated Point of Impact) of the target/aimpoint being attacked, aligned to LSB of the 5-byte field	

	A	B	C	D	E	F	G	H	I
75									
76	29-Jan-2007		307	133	TIME DT TM GP	13	11	Message Date/time group; 14 6-bit ASCII chars: DDHHMM("Z ")MMM YY Example: 170656Z APR 01	
77	20-Feb-2004		308	134	TIME UTC TOD	12	4	Time of day (from 0000 hr) in Universal Time Coord (per JSOW ICD 03-003-03)	226
78	17-Apr-2005		320	140	TIME DURATION	13	4	Duration or period of time	226
79	25-May-2007		330	14A	TIME MIN SNSTV DATA ERAS	24	4	Max time required by store to erase sensitive data	320
80	25-May-2007		331	14B	TIME MAX CTS TO CTSS	20	4	Maximum time required by store to respond to CTS with CTSS	320
81	25-May-2007		332	14C	TIME MAX RDY TO COMM	20	4	Maximum time required by store from power-up to fully comms capable	320
82	25-May-2007		333	14D	TIME MIN CTS INTERVAL	21	2	Min time after sending CTS to current store, before sending CTS to next store	227
83	25-May-2007		334	14E	TIME MIN RELEASE INTVL	22	2	Min time after releasing current store, before releasing next store	227
84	19-Oct-2010		377	179	TIME RECURRENCE INTVL	21	2	Interval (hours) between recurrences of event; 0=single event, no recurrence	249
85									
86									
87	29-Jan-2007		309	135	NAVIGATION SIGNIF BITS	22	2	Position of least significant bit (0-31) in lat, long & el. For two-dimensional coordinates, the values in elevation (b11-b15) are 'don't care'.	
88	20-Feb-2004		312	138	NAVIGATION LATITUDE	19	4	Latitude, general purpose	100
89	20-Feb-2004		313	139	NAVIGATION LONGITUDE	20	4	Longitude, general purpose	101
90	21-Sep-2005		314	13A	NAVIGATION HT ABV ELLPSD	24	4	Geodetic elevation or altitude above WGS-84 ellipsoid, general purpose	102
91	20-Feb-2004		315	13B	NAVIGATION OFFSET NORTH	23	2	Distance North from fixed point origin; referenced to local level at fixed point	236
92	20-Feb-2004		316	13C	NAVIGATION OFFSET EAST	22	2	Distance East from fixed point origin; referenced to local level at fixed point	236
93	20-Feb-2004		317	13D	NAVIGATION OFFSET DOWN	22	2	Distance down from fixed point origin; referenced to local level at fixed point	236
94									
95	23-Dec-2009		341	155	LINK NET PARTICPANT INDX	24	1	Index to data for a general link participant	324
96	23-Dec-2009		342	156	LINK CURRENT CTRLR INDX	23	1	Index to data for a weapon's Current Controler	324
97	23-Dec-2009		343	157	LINK ALTERNAT CTRLR INDX	24	1	Index to data for a weapon's Alternate Controler	324
98	23-Dec-2009		344	158	LINK 3RD PTY TGTSRC INDX	24	1	Index to data for a weapon's Third Party Target Data Source	324
99	23-Dec-2009		345	159	LINK ANTI-JAM ENBL	18	1	Controls data link anti-jam function; 0=disable, 1=enable; 2-255=reserved	324
100	23-Dec-2009		346	15A	LINK SECURE MODE ENBL	21	1	Controls data link secure mode function; 0=disable, 1=enable; 2-255=reserved	324
101	23-Dec-2009		347	15B	LINK PPLI ENBL	14	1	Controls data link standard reporting function; 0=disable, 1=enable; 2-255=reserved	324
102	23-Dec-2009		348	15C	LINK SNAPSHOT ENBL	18	1	Controls data link image transmission function; 0=disable, 1=enable; 2-255=reserved	324
103	23-Dec-2009		349	15D	LINK EMISSION CONTROL	21	1	Controls data link emissions control function; 0=radio silent, 1=transmit enabled; 2-255=reserve	324
104	23-Dec-2009		350	15E	LINK 3RD PTY TGTSRC ENBL	24	1	Controls data link 3rd Party Target Data Source function; 0=disable, 1=Ping Only, 2= Fully enable; 3-255=reserved	324
105	23-Dec-2009		351	15F	LINK TERMINAL ENBL	18	1	Controls data link radio terminal function; 0=disable, 1=enable; 2-255=reserved	324
106	23-Dec-2009		352	160	LINK GROWTH FUNCTION A	22	1	Controls data link growth function "A"; 0=disable, 1=enable; 2-255=reserved	324
107	23-Dec-2009		353	161	LINK GROWTH FUNCTION B	22	1	Controls data link growth function "B"; 0=disable, 1=enable; 2-255=reserved	324
108	23-Dec-2009		354	162	LINK GROWTH FUNCTION C	22	1	Controls data link growth function "C"; 0=disable, 1=enable; 2-255=reserved	324
109	23-Dec-2009		355	163	LINK GROWTH FUNCTION D	22	1	Controls data link growth function "D"; 0=disable, 1=enable; 2-255=reserved	324
110	23-Dec-2009		356	164	LINK GROWTH FUNCTION E	22	1	Controls data link growth function "E"; 0=disable, 1=enable; 2-255=reserved	324
111	23-Dec-2009		357	165	LINK WAVEFORM	13	1	0=Default; 1=LINK 16; 2=Combat Net Radio; 3=Mobile Satellite Services, 4=Mobile Satellite Services (Circuit Switched); 5=Internet Protocol Advanced Tactical Data Link. 6-255=Reserved	324
112	23-Dec-2009		358	166	LINK INIT FILE INDX	19	1	Index to initialization data file for a weapon's data link terminal	324
113	23-Dec-2009		359	167	LINK JTIDS UNIT ID	18	2	JTIDS Unit Number (15-bit) of weapon, right justified; values 16384 to 65535 decimal reserved	**361**
114	23-Dec-2009		360	168	8-BIT LINK ADDRESS	18	1	8-bit weapon data link address	324
115	23-Dec-2009		362	16A	16-BIT LINK ADDRESS	19	2	16-bit weapon data link address	**361**
116	23-Dec-2009		365	16D	LINK L16 NTWK PRTCPTN GP	24	2	LINK-16 Network Participation Group number; values 512-65535 reserved	**361**

	A	B	C	D	E	F	G	H	I
117	23-Dec-2009		366	16E	LINK OPER PARAM SET NMBR	24	1	Combat Net Radio Operational Parameter Set to be used by weapon terminal	324
118	23-Dec-2009		367	16F	LINK CHANNEL NUMBER	19	1	Channel number (e.g., LINK-16 stacked net number) on which weapon data link will operate	324
119	23-Dec-2009		368	170	LINK ANTNA PRELNCH MODE	23	1	Controls weapon data link antenna function before weapon launch	324
120	23-Dec-2009		369	171	LINK ANTNA POSTLNCH MODE	24	1	Controls weapon data link antenna function after weapon launch	324
121	23-Dec-2009		370	172	LINK EMCON CONT TIME	20	1	Time after launch, in seconds, that weapon will maintain radio silence. 0=0s, 1=15s, 2=30s, 3=60s, 4=120s, 5=180s, 6=240s, 7=300s, 8=until otherwise directed, 9-255 reserved	324
122	23-Dec-2009		371	173	LINK LOST COMMS TIMEOUT	23	1	Time in seconds without message from controller, after which weapon will initiate its loss-of-comms timeout function. 0=function disabled, 1=12s, 2=30s, 3=60s, 4=150s, 5=300s, 6=600s, 7=1200s, 8-255 reserved	324
123	23-Dec-2009		373	175	IPV4 SUBNET MASK	16	4	Mask to be applied (Boolean ANDed at the bit level) to an IPv4 address;Mask value 1=retain bit value, 0=set bit to zero	
124	23-Dec-2009		374	176	LINK ALT CTLR ENBL	18	1	Controls data link alternate controller; 0=disble, 1=ping enabled; 2-255=reserved	324
125	23-Dec-2009		375	177	LINK KEY DATA INDX	18	1	Index to data used for data link key purposes	324
126	19-Oct-2010		378	17A	LINK BHI INTERVAL	17	2	Interval between periodic Bomb Hit Indication (BHI) reports	229
127	19-Oct-2010		379	17B	LINK WIFT INTERVAL	18	2	Interval between periodic weapon in-flight track (WIFT) reports	229
128	19-Oct-2010		380	17C	LINK WIFT RATIO	15	1	Number of Basic weapon in-flight track (WIFT) messages per WIFT Supplement message	324
129	31-Jan-2011		392	188	LINK KEY SDU	12	1	Intended storage destination of key data. Enumerated: 0 = reserved; 1 = WIKS; 2 = KSLC; 3 = KSUC; 4 = BTL0; 5 = BTL2; 6 = BTL4; 7 = BTL6; 8 = BTU0; 9 = KSLN; 10 = KSUN; 11 = BTL1; 12 = BTL3; 13 = BTL5; 14 = BTL7; 15 = BTU1; 16-255 = reserved	324
130	31-Jan-2011		393	189	LINK KEY TYPE	13	1	Intended purpose or use of key data. Enumerated: 0 = reserved; 1 = WpnInit; 2 = CurrL16 KS0; 3 = NextL16 KS0; 4 = CurrUHF KS0; 5 = NextUHF KS0; 6 = CurrL16 BTEK; 7 = NextL16 BTEK; 8 = CurrUHF BTEK; 9 = NextUHF BTEK; 10-255 = reserved	324
131									
132	19-Oct-2010		381	17D	GEO ZONE IDENTIFICATION	23	4	Identification for a GeoZone	
133	19-Oct-2010		382	17E	GEO ZONE TYPE	13	1	Indicates GeoZone Features: bit 0 (msb) 0/1=exclusion/engagement; bit 1 0/1=2D/3D; bits 2/3/4=reserved; bits 5/6/7(lsb)= shape (000=elliptical; 001=rectangular; 010=polygon; 011 – 111=reserved)	324
134	19-Oct-2010		383	17F	GEO ZONE SEMI MAJOR AXIS	24	4	Length of the semi-major axis of a GeoZone	233
135	19-Oct-2010		384	180	GEO ZONE SEMI MINOR AXIS	24	4	Length of the semi-minor axis of a GeoZone	233
136	19-Oct-2010		385	181	GEO MAJOR AXIS ANGLE	20	2	Orientation angle of the major axis of an area, measured clockwise from WGS-84 true North	241
137	19-Oct-2010		386	182	GEO ZONE TOP HAE	16	4	Height above ellipsoid of the top of a 3D GeoZone	314
138									
139	19-Oct-2010		387	183	MISSION IDENTIFICATION	22	6	48-bit Mission identification under which weapon is being employed	
140									
141	19-Oct-2010		388	184	WARHEAD ABORT FUZING	20	1	Controls abort setting for fuze: 0=Default (Arm); 1=Dud; 2-255=reserved	324
142	31-Jan-2011		391	187	WHD FUZE HT OF BURST SCI	24	2	Sets fuze height of burst function in scientific notation; values shall be positive	389
143									
144									
145							z		
146	**Registry of Program-Specific Primitive Elements Developed**					32767	32764	Max & min Class Code this section	
147								(See above for general-purpose primitive data entities)	
148	Date of Approval for use		Class Code, decimal value	Class Code, hex value		POC e-mail	Primitive size, bytes	Description	Decimal number of reference primitive whose format defines this primitive
149									
150	25-May-2007		32767	7FFF	CONFIG MAX STEPOVR ALWD	ollrah@b	1	Max number of hung or failed stores that may be bypassed in a release sequence	324
151	19-Oct-2010		32766	7FFE	MISSION ABORT DISTANCE	er@rayth	4	As defined by Requester	233
152	19-Oct-2010		32765	7FFD	MISSION GUIDANCE MODE	er@rayth	1	As defined by Requester	324
153	19-Oct-2010		32764	7FFC	TARGET PRIORITIZATION	er@rayth	1	As defined by Requester	324

	J	K	L	M	N	O	P	Q	R	S	T
1	Alternative A: Definition of primitive by reference to another primitive				Alternative B: Definition of primitive at the bit level						
2					Byte 1						
3	Decimal number of 2nd reference primitive whose format defines this primitive	Name of 1st reference primitive whose format defines this primitive	Name of 2nd reference primitive whose format defines this primitive	Format modification or constraint for this primitive, relative to reference primitive	Bit 0	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6
4											
5		GENERAL ANGLE-M		Values shall always be positive							
6		GENERAL ANGLE-M		Values shall always be negative							
7		GENERAL ANGLE-M		Values shall always be positive							
8		GENERAL ANGLE-M		Values shall always be negative							
9		AIMPOINT IMPCT VEL		Value represents shallow limit							
10		AIMPOINT IMPCT VEL		Value represents steep limit							
11		XFER ALN PLTFM YAW DELTA		Values referenced to weapon airframe							
12		XFER ALN PLTFM PTCH DLTA		Values referenced to weapon airframe							
13		XFER ALN PLTFM ROLL DLTA		Values referenced to weapon airframe							
14		TARGET LAT		Values represent aimpoint, vs. target							
15		TARGET LONG		Values represent aimpoint, vs. target							
16		TARGET GEO EL ELPSD		Values represent aimpoint, vs. target							
17											
18		GENERAL NUMBER-L		Limited to values permitted for user-defined messages in MIL-STD-1760, Para. B.4.2.3.2.1.3 and Table B-1.							
19											
20		GENERAL NUMBER-L									
21		GENERAL DATA WORD									
22		GEN 8-BIT UNSIGND INTGR									
23		GEN 8-BIT UNSIGND INTGR									
24		GENERAL 8-BIT DATA									
25		GEN 8-BIT UNSIGND INTGR									
26											
27	240	GENERAL ACCEL-M	GENERAL ACCEL-L	--							
28	240	GENERAL ACCEL-M	GENERAL ACCEL-L	--							
29	240	GENERAL ACCEL-M	GENERAL ACCEL-L	--							
30	240	GENERAL ACCEL-M	GENERAL ACCEL-L	--							
31	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	--							
32	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	--							
33	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	--							
34	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	--							
35	238	GENERAL VELOCITY-M	GENERAL VELOCITY-L	--							
36	238	GENERAL VELOCITY-M	GENERAL VELOCITY-L	--							
37	238	GENERAL VELOCITY-M	GENERAL VELOCITY-L	--							
38	238	GENERAL VELOCITY-M	GENERAL VELOCITY-L	--							
39	238	GENERAL VELOCITY-M	GENERAL VELOCITY-L	--							

	J	K	L	M	N	O	P	Q	R	S	T
40	238	GENERAL VELOCITY-M	GENERAL VELOCITY-L	--							
41		GENERAL NUMBER-L		entity units of microseconds							
42		GENERAL ANGLE-M		positive clockwise from true North							
43		GENERAL ANGLE-M		positive downward from local level							
44		GENERAL VELOCITY-M		--							
45					MSB						
46					MSB				Byte 1		
47					0	MSB (7) or 0	MSB (6)		ASCII Character		
48					0	MSB (7) or 0	MSB (6)		ASCII Character		
49	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	--							
50					MSB	--- (MS digit) ---		LSB	MSB	--- (LS digit) ---	
51					MSB	<--------	----------	----------	----------	----------	-------->
52					MSB/bit 0	bit 1	bit 2	bit 3	bit 4	bit 5	bit 6
53					MSB	--- (MS digit) ---		LSB	MSB	--- (LS digit) ---	
54					MSB/bit 0	bit 1	bit 2	bit 3	bit 4	bit 5	bit 6
55					Bit 0	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6
56											
57					MSB----	<----------	----------	----------	----------	------	13-bit Mantissa ----
58		GEN 16-BIT UNSIGND INTGR									
59											
60		GENERAL DISTANCE-F		values shall always be positive							
61		GENERAL DISTANCE-F		values shall always be positive							
62		GENERAL DISTANCE-F		values shall always be positive							
63		GENERAL DISTANCE-F		values shall always be positive							
64		GENERAL ANGLE-M		positive clockwise from true North							
65		GENERAL DISTANCE-F		values shall always be positive							
66		GENERAL DISTANCE-F		values shall always be positive							
67					0	MSB	<--------	Latitude	-------->	LSB	MSB
68					MSB	<--------	----------	----------	----------	----------	----------
69		GENERAL DISTANCE-F		values shall always be positive							
70		GENERAL DISTANCE-F		values shall always be positive							
71		GENERAL DISTANCE-F		values shall always be positive							
72		GEN 8-BIT UNSIGND INTGR									
73	327	GENERAL PACKED BCD	GENERAL PACKED BCD	BCD values limited to 1 through 8, except MSD may be 0 for three-digit codes							
74					0	0	0	0	MSB	<--------	----------

	J	K	L	M	N	O	P	Q	R	S	T
75											
76					MSB	<----------	Char 1	----------	---------->	LSB	MSB
77	227	GENERAL TIME-M	GENERAL TIME-L	Referenced from midnight Zulu UTC							
78	227	GENERAL TIME-M	GENERAL TIME-L	--							
79		TIME DURATION									
80		TIME DURATION									
81		TIME DURATION									
82		GENERAL TIME-L									
83		GENERAL TIME-L									
84		GENERAL NUMBER-L									
85											
86											
87					0	MSB	<--------	Latitude	-------->	LSB	MSB
88		TARGET LAT		not restricted to a specific use of coordinate							
89		TARGET LONG		not restricted to a specific use of coordinate							
90		TARGET GEO EL ELPSD		not restricted to a specific use of coordinate							
91		GENERAL DISTANCE-F		--							
92		GENERAL DISTANCE-F		--							
93		GENERAL DISTANCE-F		--							
94											
95		GEN 8-BIT UNSIGND INTGR									
96		GEN 8-BIT UNSIGND INTGR									
97		GEN 8-BIT UNSIGND INTGR									
98		GEN 8-BIT UNSIGND INTGR									
99		GEN 8-BIT UNSIGND INTGR									
100		GEN 8-BIT UNSIGND INTGR									
101		GEN 8-BIT UNSIGND INTGR									
102		GEN 8-BIT UNSIGND INTGR									
103		GEN 8-BIT UNSIGND INTGR									
104		GEN 8-BIT UNSIGND INTGR									
105		GEN 8-BIT UNSIGND INTGR									
106		GEN 8-BIT UNSIGND INTGR									
107		GEN 8-BIT UNSIGND INTGR									
108		GEN 8-BIT UNSIGND INTGR									
109		GEN 8-BIT UNSIGND INTGR									
110		GEN 8-BIT UNSIGND INTGR									
111		GEN 8-BIT UNSIGND INTGR									
112		GEN 8-BIT UNSIGND INTGR									
113		GEN 8-BIT UNSIGND INTGR									
114		GEN 8-BIT UNSIGND INTGR									
115		GEN 16-BIT UNSIGND INTGR									
116		GEN 16-BIT UNSIGND INTGR									

	J	K	L	M	N	O	P	Q	R	S	T
117		GEN 8-BIT UNSIGND INTGR									
118		GEN 8-BIT UNSIGND INTGR									
119		GEN 8-BIT UNSIGND INTGR									
120		GEN 8-BIT UNSIGND INTGR									
121		GEN 8-BIT UNSIGND INTGR									
122		GEN 8-BIT UNSIGND INTGR									
123											
124		GEN 8-BIT UNSIGND INTGR									
125		GEN 8-BIT UNSIGND INTGR									
126		GENERAL TIME (F)		Values shall be positive							
127		GENERAL TIME (F)		Values shall be positive							
128		GEN 8-BIT UNSIGND INTGR									
129		GEN 8-BIT UNSIGND INTGR									
130		GEN 8-BIT UNSIGND INTGR									
131											
132					Bit 0	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6
133		GEN 8-BIT UNSIGND INTGR									
134	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	Values shall be positive							
135	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	Values shall be positive							
136		GENERAL ANGLE-M									
137		NAVIGATION HT ABV ELLPSD									
138											
139					Bit 0	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6
140											
141		GEN 8-BIT UNSIGND INTGR									
142		GENERAL DIST SCIENTIFIC									
143											
144											
145											
146	Alternative A: Definition of primitive by reference to another primitive				Alternative B: Definition of primitive at the bit level						
147					Byte 1						
148		Name of reference primitive whose format defines this primitive		Format modification or constraint for this primitive, relative to reference primitive	Bit 0	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6
149											
150		GEN 8-BIT UNSIGND INTGR									
151	234	GENERAL DISTANCE-M	GENERAL DISTANCE-L	Values shall be positive							
152		GEN 8-BIT UNSIGND INTGR									
153		GEN 8-BIT UNSIGND INTGR									

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
1																	
2		Byte 2								Byte 3							
3	Bit 7	Bit 8	Bit 9	Bit 10	Bit 11	Bit 12	Bit 13	Bit 14	Bit 15	Bit 16	Bit 17	Bit 18	Bit 19	Bit 20	Bit 21	Bit 22	Bit 23
4																	
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	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
40																	
41																	
42																	
43																	
44																	
45									LSB								
46	LSB	MSB				Byte 0			LSB								
47	LSB	0	MSB (7)	MSB (6)		Char 0			LSB								
48	LSB																
49																	
50	LSB																
51	LSB																
52	LSB/bit 7																
53	LSB																
54	bit 7	bit 8	bit 9	bit 10	bit 11	bit 12	bit 13	bit 14	LSB/bit 15								
55	Bit 7	Bit 8	Bit 9	Bit 10	Bit 11	Bit 12	Bit 13	Bit 14	Bit 15	Bit 16	Bit 17	Bit 18	Bit 19	Bit 20	Bit 21	Bit 22	Bit 23
56																	
57	----------	----------	----------	----------	---------->	----LSB		MSB---	Exponent	---LSB							
58																	
59																	
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62																	
63																	
64																	
65																	
66																	
67	<--------	Longitude	--------> LSB		MSB	<--------	Elevation	--------> LSB									
68	----------	----------	LINK-16 Track Number, 19 bits	----------	----------	----------	----------	----------	----------	----------	----------	--------> LSB		0	0	0	0
69																	
70																	
71																	
72																	
73																	
74	----------	----------	----------	----------	----------	36-bit Joint Designated Point of Impact			----------	----------	----------	----------	----------	----------	----------	----------	----------

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
75																	
76	<----------	Char 2	----------	----------> LSB		MSB	<----------	Char 3	----------	----------> LSB		MSB	<----------	Char 4	----------	----------> LSB	
77																	
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83																	
84																	
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86																	
87	<--------	Longitude	--------> LSB		MSB	<--------	Elevation	--------> LSB									
88																	
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132	Bit 7	Bit 8	Bit 9	Bit 10	Bit 11	Bit 12	Bit 13	Bit 14	Bit 15	Bit 16	Bit 17	Bit 18	Bit 19	Bit 20	Bit 21	Bit 22	Bit 23
133																	
134																	
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137																	
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139	Bit 7	Bit 8	Bit 9	Bit 10	Bit 11	Bit 12	Bit 13	Bit 14	Bit 15	Bit 16	Bit 17	Bit 18	Bit 19	Bit 20	Bit 21	Bit 22	Bit 23
140																	
141																	
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144																	
145																	
146																	
147		Byte 2								Byte 3							
148	Bit 7	Bit 8	Bit 9	Bit 10	Bit 11	Bit 12	Bit 13	Bit 14	Bit 15	Bit 16	Bit 17	Bit 18	Bit 19	Bit 20	Bit 21	Bit 22	Bit 23
149																	
150																	
151																	
152																	
153																	

	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA
1	Byte 4								Byte 5							
2																
3	Bit 24	Bit 25	Bit 26	Bit 27	Bit 28	Bit 29	Bit 30	Bit 31	Bit 32	Bit 33	Bit 34	Bit 35	Bit 36	Bit 37	Bit 38	Bit 39
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55	Bit 24	Bit 25	Bit 26	Bit 27	Bit 28	Bit 29	Bit 30	Bit 31								
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68	0	0	0	0	0	0	0	0								
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74	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	-------->	LSB

	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA
75																
76	MSB <----------		Char 5	----------	----------> LSB		MSB <----------		Char 6	----------	----------> LSB		MSB <----------		Char 7	----------
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132	Bit 24	Bit 25	Bit 26	Bit 27	Bit 28	Bit 29	Bit 30	Bit 31								
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139	Bit 24	Bit 25	Bit 26	Bit 27	Bit 28	Bit 29	Bit 30	Bit 31	Bit 32	Bit 33	Bit 34	Bit 35	Bit 36	Bit 37	Bit 38	Bit 39
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142																
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146																
147	Byte 4								Byte 5							
148	Bit 24	Bit 25	Bit 26	Bit 27	Bit 28	Bit 29	Bit 30	Bit 31	Bit 32	Bit 33	Bit 34	Bit 35	Bit 36	Bit 37	Bit 38	Bit 39
149																
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	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ
1	Byte 6								Byte 7							
2																
3	Bit 40	Bit 41	Bit 42	Bit 43	Bit 44	Bit 45	Bit 46	Bit 47	Bit 48	Bit 49	Bit 50	Bit 51	Bit 52	Bit 53	Bit 54	Bit 55
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	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ
75																
76	----------> LSB			MSB <----------	Char 8	----------	----------> LSB			MSB <----------	Char 9	----------	----------> LSB			MSB <----------
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139	Bit 40	Bit 41	Bit 42	Bit 43	Bit 44	Bit 45	Bit 46	Bit 47								
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146																
147	Byte 6								Byte 7							
148	Bit 40	Bit 41	Bit 42	Bit 43	Bit 44	Bit 45	Bit 46	Bit 47	Bit 48	Bit 49	Bit 50	Bit 51	Bit 52	Bit 53	Bit 54	Bit 55
149																
150																
151																
152																
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	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG
1	Byte 8								Byte 9							
2																
3	Bit 56	Bit 57	Bit 58	Bit 59	Bit 60	Bit 61	Bit 62	Bit 63	Bit 64	Bit 65	Bit 66	Bit 67	Bit 68	Bit 69	Bit 70	Bit 71
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	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG
75																
76	Char 10	----------	----------> LSB			MSB <----------	Char 11	----------	----------> LSB			MSB <----------	Char 12	----------	----------> LSB	
77																
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	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG
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146																
147	Byte 8								Byte 9							
148	Bit 56	Bit 57	Bit 58	Bit 59	Bit 60	Bit 61	Bit 62	Bit 63	Bit 64	Bit 65	Bit 66	Bit 67	Bit 68	Bit 69	Bit 70	Bit 71
149																
150																
151																
152																
153																

	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW
1	Byte 10								Byte 11							
2																
3	Bit 72	Bit 73	Bit 74	Bit 75	Bit 76	Bit 77	Bit 78	Bit 79	Bit 80	Bit 81	Bit 82	Bit 83	Bit 84	Bit 85	Bit 86	Bit 87
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	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW
75																
76	MSB <----------		Char 13	----------	----------> LSB		MSB <----------		Char 14	----------	----------> LSB		0	0	0	0
77																
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146																
147	Byte 10								Byte 11							
148	Bit 72	Bit 73	Bit 74	Bit 75	Bit 76	Bit 77	Bit 78	Bit 79	Bit 80	Bit 81	Bit 82	Bit 83	Bit 84	Bit 85	Bit 86	Bit 87
149																
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152																
153																