A.5.2.3 <u>Set C - Conditional version extension</u>.

National or geo-political identifier National or geo-political symbol set version Specified by national or geo-political symbol set

		SET	A				
3 0	0 2	0 1	0	0		0	0
1 2	3 4	5 6	7	8		9	10
VERSION	STANDARD IDENTITY	SYMBOL SET	STATUS	S HQ TASK FO DUMM	_	AMPI DESC	
		SET	В				
1 1	0 7	0 0	0	0	0	0	
11 12	13 14	15 16	17	7 18	19	20	
ENTITY	ENTITY TYPE	ENTITY SUBTYPE		CTOR 1 DDIFIER		CTOR :	
	CONI	DITION	AL SE	ГС			
1 1 0	7	0	0	0 0	_	0	0
21 22 23	24	25	26	27 28		29	30
SYMBOLOGY ORIGINATOR IDENTIFIER	SYMBOL ORIGINA SYMBOL	TOR	SPECIFIED BY THE SYMBOLOGY ORIGINATOR				7

FIGURE A-1. Elements of the symbol identification code

A.5.3 Set A. The first set of ten digits:

Digits 1 and 2 is the Version.

Digits 3 and 4 is the Standard Identity.

Digits 5 and 6 is the Symbol Set.

Digit 7 is the Status.

Digit 8 is the Headquarters/Task Force/Dummy.

Digits 9 and 10 is the Amplifier/Descriptor.

A.5.3.1 <u>Version</u>. The version is comprised of two digits and identifies a version change for the SIDC which occurs when there is a change in an established icon, modifier, or drawing rule for a control measure symbol. Subsequent changes will create further version changes for the SIDC.

TABLE A-I. Version.

Description	Code	
No changes to joint military symbology	10	
Any subsequent changes to joint military symbology	11–39	

A.5.3.2 <u>Standard identity</u>. Standard identity is comprised of two digits. The first digit represents the context of the symbol and the second digit reflects the standard identity. The following are the entries for standard identity:

TABLE A-II. Standard identity.

Description	1st Digit	2d Digit						
Context								
Reality	0							
Exercise	1							
Simulation	2							
Reserved for future use	3-9							
	Standard Identity							
Pending		0						
Unknown		1						
Assumed Friend		2						
Friend		3						
Neutral		4						
Suspect/Joker		5						
Hostile/Faker		6						
Reserved for future use		7-9						

A.5.3.3 Symbol set. The symbol set is comprised of two digits.

TABLE A-III. Symbol sets.

Description	Code ¹
Unknown	00
Air	01
Air Missile	02
Space	05
Space Missile	06
Land Unit	10
Land Civilian Unit/Organization	11
Land Equipment	15
Land Installation	20
Control Measure	25
Sea Surface	30
Sea Subsurface	35
Mine Warfare	36
Activities	40
Atmospheric	45
Oceanographic	46
Meteorological Space	47
Signals Intelligence – Space	50
Signals Intelligence – Air	51
Signals Intelligence – Land	52
Signals Intelligence – Surface	53
Signals Intelligence – Subsurface	54
Cyberspace	60
(Reserved for Future Use)	03-04, 07-09, 12-14, 16-19, 21-
	24, 26-29, 31-34, 37-39, 41-44,
	48-49, 55-59, and 61-98
Version Extension Flag	99

A.5.3.4 Status. The status is comprised of one digit.

TABLE A-IV. Status.

Description	Code
Present	0
Planned/Anticipated/Suspect	1
Present/Fully capable	2
Present/Damaged	3
Present/Destroyed	4
Present/Full to capacity	5
Reserved for future use	6 thru 8
Version extension flag	9

A.5.3.5 <u>Headquarters/Task Force/Dummy</u>. The headquarters/task force/dummy is comprised of one digit.

TABLE A-V. Headquarters/task force/dummy.

Description	Code
Unknown	0
Feint/Dummy	1
Headquarters	2
Feint/Dummy Headquarters	3
Task Force	4
Feint/Dummy Task Force	5
Task Force Headquarters	6
Feint/Dummy Task Force Headquarters	7
Reserved for Future Use	8
Version Extension Flag	9

 $A.5.3.6 \ \underline{Echelon/Mobility/Towed\ Array\ Amplifier}. \ The\ amplifier\ is\ comprised\ of\ two\ digits.$

TABLE A-VI. Descriptor: Echelon/mobility/towed array amplifier.

Description	1st Digit	2d Digit
Unknowm	0	0
Echelon at brigade and below	1	
Team/Crew		1
Squad		2
Section		3
Platoon/detachment		4
Company/battery/troop		5
Battalion/squadron		6
Regiment/group		7
Brigade		8
Version extension flag		9
Echelon at division and above	2	
Division		1
Corps/MEF		2
Army		3
Army Group/front		4
Region/Theater		5
Command		6
Reserved for future use		7 thru 8
Version extension flag		9
Equipment mobility on land	3	
Wheeled limited cross country		1
Wheeled cross country		2
Tracked		3
Wheeled and tracked combination		4

TABLE A-VI. <u>Descriptor: Echelon/mobility/towed array amplifier - Continued.</u>

Description	1st Digit	2d Digit
Towed	-	5
Rail		6
Pack animals		7
Reserved for future use		8
Version extension flag		9
Equipment mobility on snow	4	
Over snow (prime mover)		1
Sled		2
Reserved for future use		3-8
Version extension flag		9
Equipment mobility on water	5	
Barge		1
Amphibious		2
Reserved for future use		3 thru 8
Version extension flag		9
Naval towed array	6	
Short towed array		1
Long towed Array		2
Reserved for future use		3 thru 8
Version extension flag		9
Reserved for future use	7 thru 8	
Version extension flag	9	9

A.5.4 Set B. The second set of ten digits:

Digits 11 and 12 is the entity.

Digits 13 and 14 is the entity type.

Digits 15 and 16 is the entity subtype.

Digits 17 and 18 is the first modifier.

Digits 19 and 20 is the second modifier.

The entity is comprised of two digits. The entity type is comprised of two digits. The entity subtype is comprised of two digits. The first modifier is comprised of two digits. The second modifier is comprised of two digits. The tables in this section are organized by symbol sets.

DIMENSION STANDARD IDENTITY	UNKNOWN	SPACE	AIR	LAND UNIT	LAND EQUIPMENT AND SEA SURFACE	LAND INSTALLATION	SEA SUBSURFACE	ACTIVITY/EVENT	DISMOUNTED INDIVIDUAL
PENDING (YELLOW)	?								
UNKNOWN (YELLOW)	?								
ASSUMED FRIEND (CYAN)	?								
FRIEND (CYAN)	?								
NEUTRAL (GREEN)	?								
SUSPECT (RED)	?		A.A.A.			A STATE OF THE STA	A ROBERT AND A STATE OF THE STA		Particular de la constitución de
HOSTILE (RED)	?								

Note: Frames displayed with solid lines or alternating black and white dotted lines, as shown above, indicate status as present, i.e. the object exists at the location identified. See Table IV for examples of frames depicting planned or anticipated status.

Table 1-1: Standard Identities and Dimensions.

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TABLE I. Frame shapes depicting standard identities and battle dimensions.

BATTLE		ABOVE S	SURFACE		SURI	FACE			
DIMENSION					Ground (G)	T			
STANDARD IDENTITY	Unknown (Z)	Space (P)	Air (A)	Units	Equipment	Installations	Sea Surface (S)	Subsurface (U)	SOF (F)
PENDING (P) (YELLOW)	⇔								
UNKNOWN (U) (YELLOW)	?								
FRIEND (F) (CYAN)	?								
NEUTRAL (N) (GREEN)	?								
HOSTILE (H) (RED)	?			\Diamond	\Diamond	\Diamond	\Diamond		\Diamond
ASSUMED FRIEND (A) (CYAN)	8								
SUSPECT (S) (RED)	?			\Diamond	\(\frac{1}{2}\)		\Diamond		

Note: Frames displayed with solid lines, as shown above, indicate status as present, i.e., the object exists at the location identified. See table III for examples of frames depicting planned or anticipated status.

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TABLE II. Frame shapes depicting exercise amplifying descriptors and battle dimensions.

BATTLE DIMENSION		ABOVE S	SURFACE		SURI	FACE			
EXERCISE					Ground (G)				
AMPLIFYING DESCRIPTOR	Unknown (Z)	Space (P)	Air (A)	Units	Equipment	Installations	Sea Surface (S)	Subsurface (U)	SOF (F)
EXERCISE PENDING (G) (YELLOW)	?	×	x	O x	X	• x	X	X	×
EXERCISE UNKNOWN (W) (YELLOW)	× (?-)	×	×	×	~	\bigcirc_{x}	\(\)	×	×
EXERCISE FRIEND (D) (CYAN)	N/A	×	\bigcap^{x}	x	$\bigcirc_{\mathbf{x}}$	×	$\bigcirc_{\mathbf{x}}$	X	X
EXERCISE NEUTRAL (L) (GREEN)	N/A	X	X	x		X	X		x
EXERCISE ASSUMED FRIEND (M) (CYAN)	N/A	×	×	X	×	X	x	X	×
JOKER (J) (RED)	N/A			J					J
FAKER (K) (RED)	N/A	K	∩ ^K	K	O _K	K	O _K	K	K

Note: Frames displayed with solid lines, as shown above, indicate status as present, i.e., the object exists at the location identified. See table III for examples of frames depicting planned or anticipated status

AIR	LAND UNITS AND INSTALLATIONS	DISMOUNTED INDIVIDUAL	LAND EQUIPMENT AND SEA SURFACE	SUBSURFACE	SPACE	ACTIVITY/EVENT
1.3L ←1.1L→	1.44L →	1.4L 1.44L	1.44L — 1.44L —	1.3L	1.1L →	1.44L →
1.2L ← 1.1L →	↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑	1.1L →		1.1L →	1.2F -1.1L	↑ ↑ ↑ ↑
1.2L ←1.1L→	↑ 1.1L →	↑ 1.1L →	↑1.1L→	1.2L→ 1.1L→	1.2L ← 1.1L →	↑ 1.1L →
1.5L →	1.44L —	1.44L	1.44L 1.44L	1.3L	1.3L → 1.5L →	1.44L →

Table 1-7: Relative Symbol Frame Sizes.

- 4. The frame size shall be determined in relation to an octagon defining the outer boundary for all icons. "L" is the default length and height of the octagon (see Table 1-7).
 - a. Frame length and height may vary from 1.0L to 1.5L, depending on the particular shape.
 - b. The dimensions of unframed icons should be the same as framed icons.
- 5. The relative dimensions for the sectors in the bounding octagon shall be as shown in Figure 1-15.

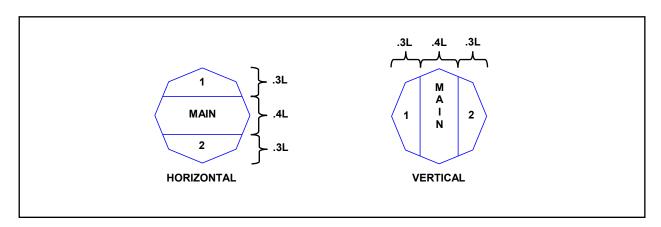


Figure 1-15: Bounding Octagon Sector Dimensions.

- 6. It is critical that the line width is sufficient to ensure frame legibility and discriminability at normal viewing distance. The optimum line width may differ depending on frame size and be affected by whether the frame is filled or unfilled and displayed in colour or black/white. Usability testing should be performed to identify the optimum rendering for a given implementation.
- 7. Table 1-8 contains the default colours for use within this standard. Colour saturation may need to vary depending on the display option(s) selected. For example, to ensure optimum symbol discrimination, different shades of red may be needed in a frame-only symbol as compared to the colour fill in a symbol with a black frame and icon.

- h. **Amplifiers.** An amplifier optionally provides additional information about the symbol being portrayed and is displayed outside the frame. The generic placement of amplifier fields is shown in Figure 1-4.
 - (1) Amplifier fields vary by dimension. The default placement of amplifiers fields is specified in the subsequent chapters.
 - (2) To reduce display cluttering, only use minimum essential amplifiers.

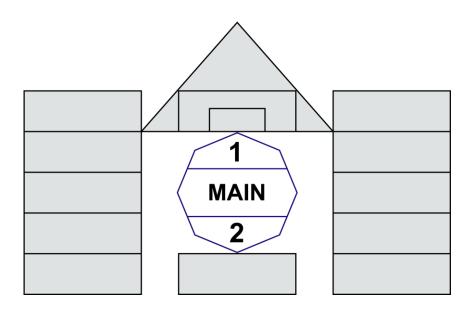


Figure 1-4: Standard Amplifier Fields.

- (3) The operational condition amplifier provides a graphic representation of an entity's (equipment or installation) operational condition (see Table 1-3). An alternative operational condition colour representation is shown in Table 1-4. Using the alternate colour representation of Table 1-4 allows the condition of "Full to Capacity" to be expressed.
- (4) The "Rendered Ineffective" operational condition amplifier shall be used when equipment capable of inflicting injury and/or death (IEDs or mines) is known to have been defused or rendered inoperable while under the control of friendly forces. The "Damaged" operational condition amplifier shall be used where "Rendered Ineffective" does not apply.
- (5) "Full to Capacity" is associated with a symbolized object where its capacity can be measured and the status of that capacity is relevant.

5.3.4 <u>Modifiers</u>. A modifier provides optional additional information about a symbol, except in the case of field E, the frame shape modifier, which is mandatory. A modifier can be static or dynamic. The size and placement of a static modifier are fixed and remain constant, while the size and placement of a dynamic modifier are based on the attributes of the object represented by the symbol and can change as these attributes and the scale of the background change. The field ID, field title, description, and maximum allowable display and transmission lengths of symbol modifiers are presented in table IV and 5.8. The default placement of static modifiers in fields around the symbol is shown in figure 2, and an example of each static graphic modifier is included in figure 3 and tables III-1 and III-2. The placement of these modifiers applies to all tactical symbols regardless of battle dimension or whether the symbol is framed or unframed. Implementation guidance, where available, is provided in the appendix for each symbology set. Static graphic and text modifiers are described in 5.3.4.1 through 5.3.4.10 and 5.3.4.12; dynamic graphic modifiers are discussed in 5.3.4.11.

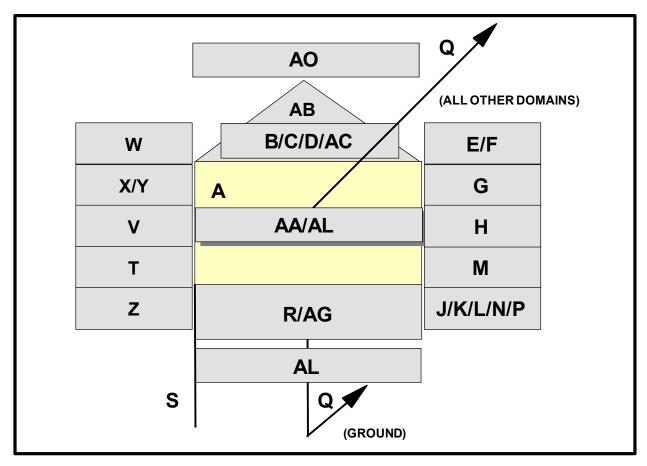


FIGURE 2. Field positions for tactical symbols.

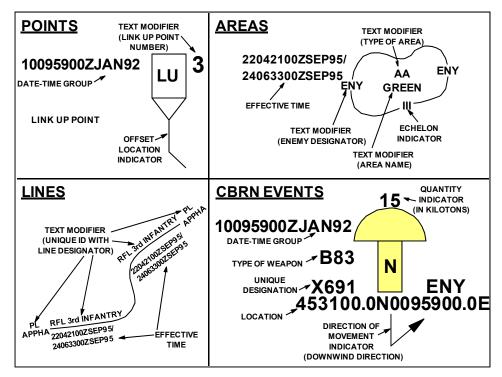


FIGURE 12. Graphic modifiers for tactical graphics.

- 5.5.2.1 <u>Direction of movement indicator</u>. The direction of movement indicator is an arrow identifying the direction of movement of CBRN events. The arrow extends downward from the center of the CBRN icon and points in the direction of movement. The indicator is represented in field Q as defined in table XI and positioned as shown in figure 11.
- 5.5.2.2 <u>Echelon indicator</u>. The echelon indicator provides a graphic representation of command level and is used to show the element echelon on boundary lines, lines, and areas. Echelon indicator codes are listed in table V and the appendix for each symbology set. The indicator is represented in field B as defined in table XI and positioned as shown in figure 10.
- 5.5.2.3 Offset location indicator. The offset location indicator is used when placing an object away from its actual location. The indicator is a line extending downward from an appropriate anchor point on an icon. The actual location (field Y) is given in latitude and longitude. The indicator is represented in field S in table XI and positioned as shown in figures 10, 11, and 12.
- 5.5.2.4 <u>Text modifiers</u>. Table XI defines the specific content, length, and type of each text modifier. Additional information is contained in field H, with the content of this field being implementation specific, provided the maximum number of characters in each field is not exceeded.
- 5.5.2.5 <u>Altitude/depth modifier</u>. This field may contain alternate value formats. Enter a description of the altitude/depth (X) using one of the following.

TABLE X. Present and planned status for tactical graphics.

	POINT GRAPHICS	BOUNDARY LINE GRAPHICS	AREA GRAPHICS
PRESENT POSITION (P)			22040000ZJAN99 24040000ZJAN99 AA Green
ANTICIPATED, PLANNED, SUSPECTED, OR ON ORDER (A)			AA \ Green

5.5.2 Modifiers. A modifier provides optional additional information about a tactical graphic. The field ID, field title, description, and maximum allowable display lengths of tactical graphic modifiers are presented in table XI. The default placement of modifiers in fields for points, lines, areas, boundaries, and chemical, biological, radiological, and nuclear (CBRN) events is shown in figures 10 and 11, and an example of each modifier (both text and graphic indicators) is included in figure 12. As indicated in figure 10, certain fields can be displayed more than once within a tactical graphic. In some cases, a tactical graphic may require multiple instances of a given modifier in order to fully create or represent an object: examples of these fields are H, T, W, and Y. The unnumbered fields should be filled before the numbered fields (i.e., fields W, H, and T should be used before fields W1, H1, and T1). As indicated in table XI, not all modifiers are applicable to all tactical graphics. However, when any such modifier is displayed, it shall be defined in accordance with the contents of this table and positioned in accordance with figures 10 and 11.

TABLE XI. Modifier field definitions and maximum display lengths for tactical graphics.

FIELD ID	FIELD TITLE	DESCRIPTION	P ¹	L^1	\mathbf{A}^{1}	BL^1	N^1	B/C ¹
A	Symbol Indicator	The basic graphic (see 5.5.1).	G^2	G	G	G	G	G
В	Echelon	A graphic modifier in a boundary graphic that identifies command level (see 5.5.2.2, table V, and figures 10 and 12).	-	G	G	G	-	-
С	Quantity	A text modifier in a nuclear symbol that identifies the detonation in kilotons; yield (can be displayed in decimals).	-	1	1	-	6 ²	-
Н	Additional Information	A text modifier for tactical graphics; content is implementation specific.	20	20	20	-	20	20
N	Hostile (Enemy)	A text modifier for tactical graphics; letters "ENY" denote hostile symbols.	3	3	3	3	3	3
Q	Direction of Movement Indicator	A graphic modifier for CBRN events that identifies the direction of movement (see 5.5.2.1 and figure 11).	-	-	-	-	G	G

TABLE XI. <u>Modifier field definitions and maximum display lengths for tactical graphics</u> - Continued.

FIELD ID	FIELD TITLE	DESCRIPTION	P ¹	\mathbf{L}^{1}	A ¹	BL^1	N ¹	B/C ¹
S	Offset Location Indicator	A graphic modifier for points and CBRN events used when placing an object away from its actual location (see 5.5.2.3 and figures 10, 11, and 12).	G	-	-	-1	G	G
Т	Unique Designation	A text modifier that uniquely identifies a particular tactical graphic; track number. Nuclear: delivery unit (missile, aircraft, satellite, etc.)	15	15 15 15		35	15	15
V	Туре	A text modifier that indicates nuclear weapon type.	-	-	-	-	20	-
W^3	Date-Time Group (DTG)	A text modifier that displays DTG format: DDHHMMSSZMONYYYY or "O/O" for on order (see 5.5.2.6).	16	16	16	-	16	16
X	Altitude/Depth	A text modifier that displays the minimum, maximum, and/or specific altitude (in feet or meters in relation to a reference datum), flight level, or depth (for submerged objects in feet below sea level). See 5.5.2.5 for content.	14	14	14	ı	14	14
Y	Location (Latitude and Longitude)	A text modifier that displays a graphic's location in degrees, minutes, and seconds (or in UTM or other applicable display format).	19	19	19	19	19	19
AM	Distance	A numeric modifier that displays a minimum, maximum, or a specific distance (range, radius, width, length, etc.), in meters.	6	6	6	-	-	-
AN	Azimuth	A numeric modifier that displays an angle measured from true north to any other line in degrees.	3	3	3	-	-	-

Notes:

- 1. Column headings: P = points, L = lines, A = areas, BL = boundary lines, N = nuclear, B/C = bio/chem.
- 2. Numeric entry indicates text modifier. "G" indicates graphic modifier. A dash (-) inside boxes indicates non-applicable.
- 3. Field W: D = day, H = hour, M = minute, S = second, Z = time zone suffix, MON = month, and Y = year.

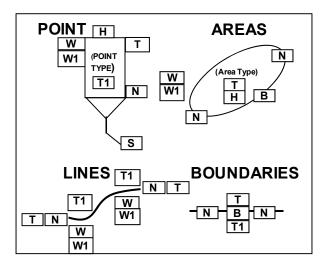


FIGURE 10. <u>Placement modifiers for points</u>, lines, areas and boundaries.

Notes

- 1. For lines, field T can include both the line designator and line name if available.
- 2. When placing a modifier inside an irregularly shaped area, it may be necessary to displace the modifier (see 5.4.4).

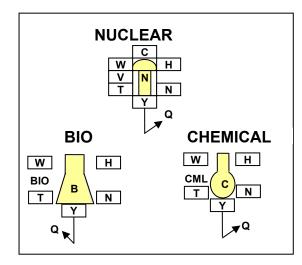


FIGURE 11. <u>Placement of modifiers for chemical, biological,</u> radiological and nuclear events.

TABLE B-I. Space symbol building process - Continued.

STEP	DESCRIPTION	EXAMPLE
4.	If required, choose a modifier to depict another characteristic of the icon. In this example, the modifier is "optical," a sector 2 modifier. The example depicts a "friendly civilian earth observation satellite on a low earth orbit with optical sensor."	LEO
5.	The finished symbol will appear as shown in the example.	LEO

B.5.3.2 <u>Icons and modifiers</u>. All icons shall be placed within the main sector of the bounding octagon (<u>see table B-I</u>). When depicted, modifiers shall be placed in sectors 1 or 2 as appropriate (<u>see table B-I</u>). Only one modifier may be placed in each sector at a given time. Multiple modifiers in the same position are prohibited due to legibility concerns.

B.5.3.3 Amplifiers.

B.5.3.3.1 <u>Text amplifiers</u>. The purpose of the static text amplifiers described in this appendix is to standardize the display of additional alphanumerical information on identity, movement and location and capabilities. <u>See 5.1.6</u> for more information on amplifiers. <u>Figure B-3</u> shows the placement of space symbol amplifiers around the friend symbol frame. <u>Table B-II</u> provides descriptions and formats of each amplifier.

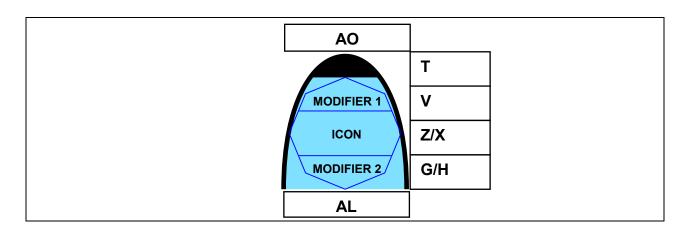


FIGURE B-3. Placement of space symbol amplifiers.

TABLE C-I. Air symbol building process - Continued.

STEP	DESCRIPTION	EXAMPLE
	If required, choose a modifier to depict another characteristic of the icon. In this example, the modifier is "light," a sector 2 modifier. The example depicts a "friendly military rotary-wing cargo aircraft with light cargo capacity."	C
5.	The finished symbol will appear as shown in the example.	C

C.5.3.2 <u>Icons and modifiers</u>. All icons shall be placed within the main sector of the bounding octagon (<u>see table C-I</u>). When depicted, modifiers shall be placed in sectors 1 or 2 as appropriate (<u>see table C-I</u>). Only one modifier may be placed in each sector at a given time. Multiple modifiers in the same position are prohibited due to legibility concerns.

C.5.3.3 Amplifiers.

C.5.3.3.1 <u>Heading</u>. The purpose of the static text amplifiers described in this appendix is to standardize the display of additional alphanumerical information on identity, movement and location and capabilities. <u>See 5.1.6</u> for more information on amplifiers.

<u>Figure C-3</u> shows the placement of air symbol amplifiers around the friend symbol frame.

<u>Table C-II</u> provides descriptions and formats of each amplifier.

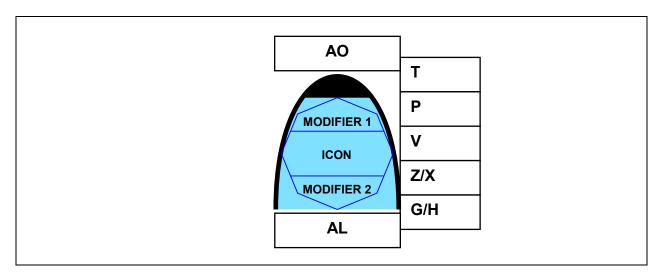


FIGURE C-3. Placement of air symbol amplifiers.

TABLE D-I. Land symbol building process - Continued.

STEP	DESCRIPTION	EXAMPLE
4.	The finished symbol will appear as shown in the example.	

D.5.3.2 <u>Icons and modifiers</u>. All icons shall be placed within the main sector of the bounding octagon (<u>see table D-I</u>). When depicted, modifiers shall be placed in sectors 1 or 2 as appropriate (<u>see table D-I</u>). Only one modifier may be placed in each sector at a given time. Multiple modifiers in the same position are prohibited due to legibility concerns.

D.5.3.3 Amplifiers.

D.5.3.3.1 <u>Text amplifiers</u>. The purpose of the static text amplifiers described in this appendix is to standardize the display of additional alphanumerical information on identity, movement and location and capabilities. <u>See 5.1.6</u> for more information on amplifiers. <u>Figure D-3</u> shows the placement of land symbol amplifiers around the friend symbol frame. <u>Table D-II</u> provides descriptions and formats of each amplifier.

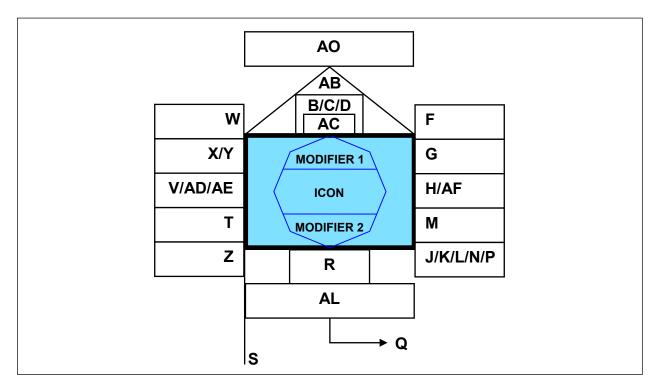


FIGURE D-3. Placement of land symbol amplifiers.

appropriate (<u>see table D-I</u>). Only one modifier may be placed in each sector at a given time. Multiple modifiers in the same position are prohibited due to legibility concerns.

E.5.3.3 Amplifiers.

E.5.3.3.1 <u>Text amplifiers</u>. The purpose of the static text amplifiers described in this appendix is to standardize the display of additional alphanumerical information on identity, movement and location and capabilities. <u>See 5.1.6</u> for more information on amplifiers. <u>Figure E-2</u> shows the placement of sea surface symbol amplifiers around the friend symbol frame. <u>Table D-II</u> provides descriptions and formats of each amplifier.

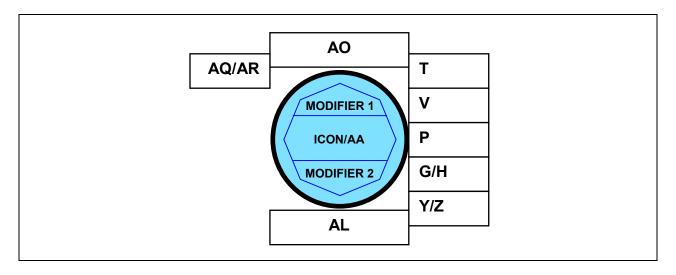


FIGURE E-2. Placement of sea surface symbol amplifiers.

TABLE E-II. Descriptions and formats of sea surface symbol amplifiers.

FIELD	FIELD TITLE	DESCRIPTION	FORMAT
A	Ship/Ship Type Icon	Uses icon and sector modifiers	
G	Staff Comments	A text amplifier for units, equipment and installations; content is implementation specific.	
Н	Additional Information	A text amplifier for units, equipment and installations; content is implementation specific.	
P	Automatic Identification System (AIS)	A text amplifier displaying the maritime Automatic Identification System.	
Т	Unique Designation (Track Number)	A text amplifier for units, equipment and installations that uniquely identifies a particular symbol or track number.	Prefix = TN:##### Example: TN:13579
V	Туре	A text amplifier for equipment that indicates types of equipment.	

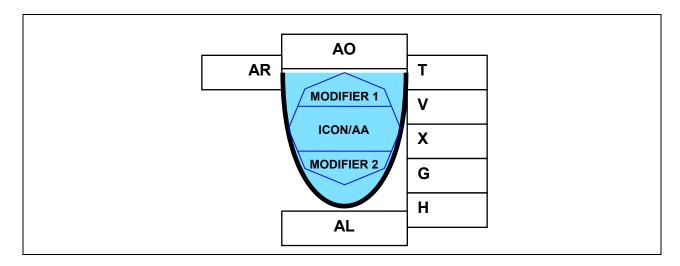


FIGURE F-3. Placement of subsurface symbol amplifiers.

TABLE F-II. Descriptions and formats of subsurface symbol amplifiers.

FIELD	FIELD TITLE	DESCRIPTION	FORMAT
A	Sub/Sub Type Icon	Uses icon and sector modifiers	
G	Staff Comments	A text amplifier for units, equipment and installations; content is implementation specific.	
Н	Additional Information	A text amplifier for units, equipment and installations; content is implementation specific.	
Т	Unique Designation (Track Number)	A text amplifier for units, equipment and installations that uniquely identifies a particular symbol or track number.	Prefix = TN:##### Example: TN:13579
V	Туре	A text amplifier for equipment that indicates types of equipment.	
X	Depth	A text amplifier for equipment that displays depth for submerged objects.	Measurement units (FT, M) shall be displayed within the string. Ex: 105 FT
AL	Operational Condition	A graphic amplifier for equipment or installations that indicates operational condition or capacity.	Operational Condition amplifier, if used, shall be comprised of only one color. Ex. Aircraft: Red - damaged, Green – fully capable Ex: Missile: Red – imminent threat, Green – no threat
AO	Engagement Bar	A graphic amplifier placed immediately atop the symbol. May denote, 1) local/remote status; 2) engagement status; and 3) weapon type.	A:BBB-CC, where A = remote/local BBB = engagement status CC = weapon asset
AR	Special Designator	Special track designators such as Non-Real Time (NRT) and Tactically Significant (SIG) tracks are denoted here.	The 3-character strings, NRT or SIG

TABLE G-I. Activities symbol building process - Continued.

STEP	DESCRIPTION	EXAMPLE
4.	The finished symbol will appear as shown in the example.	IED

G.5.3.2 <u>Icons and modifiers</u>. All icons shall be placed within the main sector of the bounding octagon (<u>see table G-I</u>). When depicted, modifiers shall be placed in sectors 1 or 2 as appropriate (<u>see table G-I</u>). Only one modifier may be placed in each sector at a given time. Multiple modifiers in the same position are prohibited due to legibility concerns.

G.5.3.3 Amplifiers.

G.5.3.3.1 <u>Text amplifiers</u>. The purpose of the static text amplifiers described in this appendix is to standardize the display of additional alphanumerical information on identity, movement and location and capabilities. <u>See 5.1.6</u> for more information on amplifiers. <u>Figure G-2</u> shows the placement of activities symbol amplifiers around the friend symbol frame. <u>Table G-II</u> provides descriptions and formats of each amplifier.

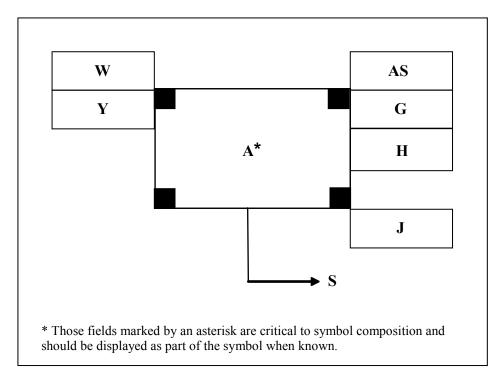


FIGURE G-2. Activities icon, modifier and amplifier fields.

DIMENSION			SURFACE				
OPER.			LAND		SEA	SUB	
CONDITION	AIR/SPACE	UNITS	EQUIPMENT	INSTALLATIONS	SURFACE	SURFACE	
FULLY CAPABLE		N/A					
DAMAGED/RENDERED INEFFECTIVE		N/A	Ø		Ø		
DESTROYED		N/A	X	X	X	X	

Table 1-3: Operational Condition Amplifiers for Icon-based Symbols.

DIMENSION			;	SURFACE		
OPER.			LAND		SEA	SUB
CONDITION	AIR/SPACE	UNITS	EQUIPMENT	INSTALLATIONS	SURFACE	SURFACE
FULLY CAPABLE		N/A				
DAMAGED/RENDERED INEFFECTIVE		N/A				
DESTROYED		N/A				
FULL TO CAPACITY		N/A				

Table 1-4: Alternate Operational Condition Colour Amplifiers for Icon-based Symbols.

(6) Position, direction and speed can be depicted with additional amplifiers shown in Figure 1-5. When used:

- i. The position indicator shall extend a distance of one octagon height below the bottom of the frame.
- ii. The length of the movement indicator line shall be the same as the height of the octagon.
- iii. The speed leader shall start from the centre of the symbol.
- iv. The speed leader shall point in the direction of movement.
- v. The length of speed leader shall correspond to the speed of the depicted symbol.

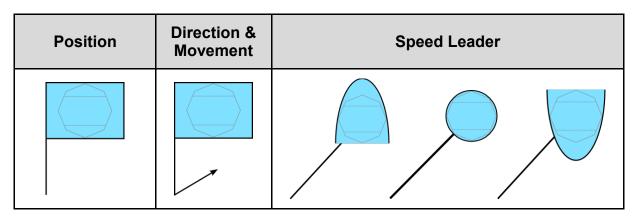


Figure 1-5: Additional Amplifiers.

- 2. **Echelon indicator.** The echelon indicator provides a graphic representation of command level and is used to show the element echelon on installations, boundary lines, lines and areas. The indicator is shown in Figure 1-6.
- 3. **Installation indicator**. The installation indicator is a shaded block used to show that a particular symbol denotes an installation. Although installations are included in the symbol hierarchy, the addition of an installation indicator can turn any tactical symbol into an installation. The indicator is shown in Figure 1-6.
- 4. **Task force indicator**. The task force indicator is a bracket that identifies a unit or activities symbol as a task force. The indicator is shown in Figure 1-6.
- 5. **Feint/dummy indicator**. The feint or dummy indicator is a dashed inverted "V" that identifies offensive or defensive units, equipment and installations intended to draw the enemy's attention away from the area of the main attack. The indicator is shown in Figure 1-6.
- 6. **Offset location amplifier**. The offset location amplifier is used when placing an object away from its actual location. The amplifier is a line extending downward from the left side of a frame or an appropriate anchor point on an icon. The offset location amplifier differs from the headquarters staff amplifier in that the former has an elbow extending to the actual location. The indicator is shown in Figure 1-6. In addition, the actual location is given in latitude and longitude.

7. **Direction of movement amplifier**. The direction of movement amplifier is an arrow or staff identifying the direction of movement or intended movement of an object. For land symbols, the amplifier is an angled arrow extending downward from the bottom centre of the frame or icon and pointing in the direction of movement. For all other symbols, the amplifier is an arrow extending from the centre of the frame or icon and pointing in the direction of movement. The indicator is shown in Figure 1-6.

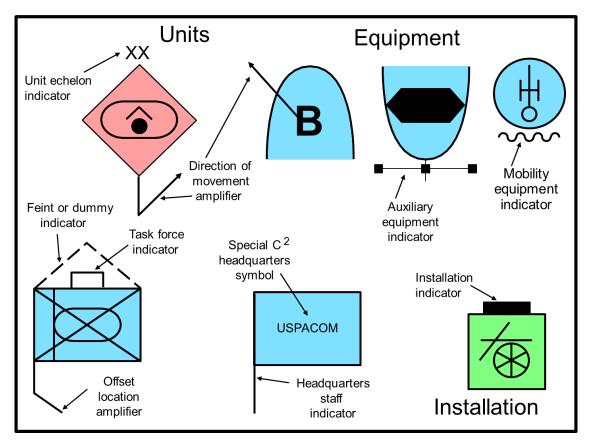


Figure 1-6: Static Graphic Modifiers for Tactical Symbols.

- 8. **Engagement amplifier bar**. The engagement amplifier bar may be used to designate engagements and/or to indicate targets. Both may be done in conjunction where depicted targets contain engagement information.
- 9. **Engagement designation using the engagement amplifier bar**. Engagement bars are positioned immediately atop the hostile target and its assigned friendly track. Example depictions of engagement bars are illustrated in Figure 1-7 and Figure 1-8.

deemed targets shall have a red bar (RGB: 255, 0, 0) to indicate target. For hostile tracks deemed to be non-targets, white (RGB: 255, 255, 255) should be used to indicate non-target. Finally for hostile tracks which have expired shall be coloured orange (RGB: 255, 120, 0). Figure 1-9 depicts the three target denotations.



Figure 1-9: Engagement Amplifier Bar Colours for Target Designation.

12. **Engagement Status Text.** If engagement text is incorporated, either white (RGB: 255, 255, 255) or black (RGB: 0, 0, 0) may be used to denote engagement status. Otherwise, for non-targets and expired tracks, engagement status within the engagement amplifier bars shall remain black (see Figure 1-10).



Figure 1-10: Engagement Amplifier Bar Text Colours for Target Designation.

- 13. **Engagement amplifier bar structure.** The engagement amplifier shall be arranged as follows: A:BBB-CC, where A (1 character) denotes a local versus remote engagement, BBB (up to 3 characters) denotes engagement state and CC (up to 2 characters) denotes weapon deployment/asset control.
- 14. **Remote and local engagements**. Remote and local engagements may be identified in the engagement amplifier (part A of A:BBB-CC). A remote engagement is defined as an engagement assigned outside of own platform control. A local engagement is defined as an engagement assigned to own platform. Local engagements shall have no letter assignment in the A:BBB-CC engagement bar; whereas, remote engagements shall be denoted as "R" in the engagement bar. In the case of multiple engagements, there may be a mixture of both local and remote engagements. In such cases, "B" shall be denoted to indicate both local and remote engagements and shall be used in conjunction with the multiple engagements amplifier (MLT).
- 15. **Engagement stage**. Engagement stage may be identified by up to a three-character code (part BBB of A:BBB-CC). Typical engagement stages to depict include assign/cover, engage and missile(s) in flight. Other engagement events such as hold fire, cease fire, cease engage, break engagement, terminate engagement, management by exception, management by exception less than threshold and others may be depicted in the engagement amplifier. In the case of multiple engagements where no one specific engagement is highlighted, "MLT" may

be used to indicate multiple engagements. In conjunction with the MLT designation, the number of engagements shall be listed in the subsequent CC field. Table 1-5 depicts engagement stage codes.

Engagement Stage	Code
ASSIGN/COVER	ASN
ENGAGE	ENG
MISSILE IN FLIGHT	MIF
CEASE FIRE	CF
CEASE ENGAGE	CE
HOLD FIRE	HF
TERMINATE ENGAGEMENT	TE
BREAK ENGAGEMENT	BE
MANAGEMENT BY EXCEPTION (MBE)	MBE
MBE LESS THAN THRESHOLD	M <t< td=""></t<>
MULTIPLE ENGAGEMENTS ²	MLT

Notes

- 1. The term "Engagement" as used to denote both air-to-air and air-to-ground/air-to-surface activities.
- 2. Number of engagements shall be represented in CC field.

Table 1-5: Engagement Stage Codes.

16. **Weapons assignment or deployment**. Weapons assignment or deployment may also be presented in the engagement amplifier (part CC of A:BBB-CC). Either deployed weapons such as missiles, guns and torpedoes or controlled assets such as unmanned systems, interceptor aircraft and attack aircraft may have representation in the engagement bar. In the case where multiple engagements are represented within a single engagement amplifier bar, the number of engagements starting from "02" shall be used in the CC field. Table 1-6 depicts weapon and asset codes.

Weapon/Asset	Code
MISSILE	М
BALLISTIC MISSILE	ВМ
CRUISE MISSILE	CM
GUN	GN
TORPEDO	Т
ATTACK AIRCRAFT	Α
COMBAT AIR PATROL (DEFENSIVE COUNTER AIR)	С
DEFENSIVE COUNTER AIR (COMBAT AIR PATROL)	D
UNDERSEA WARFARE (USW)/ANTISUBMARINE WARFARE (ASW)ENGAGEMENT	UW
MINE WARFARE (MIW) ENGAGEMENT	MW
SURFACE WARFARE (SUW) ENGAGEMENT	SW
ELECTRONIC ATTACK	EA
ELECTRONIC DEFENSE	ED
UNMANNED VEHICLE	UV
CLOSE-IN WEAPON SYSTEM	CW
LAMPS	L3
VERTICAL LAUNCH ASROC ¹	VA
NUMBER OF ENGAGEMENTS ²	(02-99)

Notes:

- Some ships still use non-vertical launch ASROC
 Shall only be used in conjunction with multiple engagements.
 Valid numbers are 02-99.

Table 1-6: Weapon and Asset Codes.

1.2.2. Placement of icons and modifiers

1. Figure 1-11 shows an example of the placement of an icon, its modifiers and amplifiers around a hostile Land or Sea Surface frame.

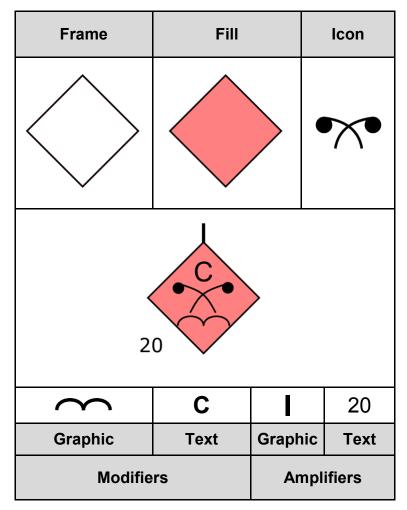


Figure 1-11: Example of Icon, Modifier, and Amplifier Placement.

- 2. The bounding octagon serves as the spatial reference for placement of icons and modifiers within the frame of a symbol (see Figure 1-15). It is divided into three sectors that specify where icons and modifiers are positioned and how much space is available for sizing of icons and modifiers. To optimize legibility, icons may be enlarged within the constraints of the bounding octagon when one or no modifiers are displayed.
- 3. Full frame icons occupy the entire frame and exceed the dimensions of the main sector of the bounding octagon and touch the interior border of the frame. Most icons do not exceed the dimensions of the main sector of the bounding octagon, but full frame icons are exceptions to this size rule (see Figure 1-12 for examples). Full frame icons occur only in the Land Dimension and Dismounted Individual Dimension (see Chapters 3 and 4).

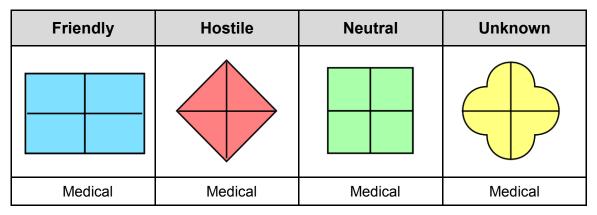


Figure 1-12: Examples for Full Frame Icons.

4. Full Octagon icons are icons that do not adhere to the sectors of the bounding octagon and do not exceed the dimensions of the bounding octagon (see Figure 1-13 for an example).



Figure 1-13: Example of a Full Octagon Icon

- 5. When depicted, modifiers shall be placed in sectors 1 or 2 of the bounding octagon as appropriate. Only one modifier may be placed in each sector at a given time. Multiple modifiers in the same position are prohibited due to legibility concerns. A modifier may not be placed in any sector where the modifier overlaps the icon.
- 6. The placement of icons, modifiers and amplifiers is the same regardless of frame shape or Standard Identity.

1.2.3. Control Measure Symbols

- 1. Control Measures are directives given to assign responsibilities, coordinate fires and manoeuvre, and control operations. They may be boundaries, special area designations, and other unique markings related to operational environment geometry and necessary for planning and management of operations. Control Measure symbols provide graphical operational information that cannot be displayed via icon based symbols alone.
 - a. Control Measure symbols can be displayed as points, lines, areas or tactical mission tasks (for examples see Figure 1-14), and can be combined with other symbols, icons and modifiers.

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TABLE XIV. Symbol display options.

EVAMDIEC		
EXAMPLES CARRIER FERRY		DISPLAY OPTION DESCRIPTIONS
H	F	Frame: ON (black or white depending on background) Fill: ON (use default color indicating standard identity) Icon: ON (black or white) Modifiers: ON (civilian sea surface symbols do not permit modifiers) Note: The first column example is a MILITARY COMBATANT, CARRIER with modifiers for HELICOPTER EQUIPPED and NUCLEAR POWERED. The second column example is a CIVILIAN, MERCHANT SHIP and FERRY.
H N	F	Frame: ON (black or white depending on background) Fill: OFF Icon: ON (black or white) Modifiers: ON
H	F	Frame: ON (use default color indicating standard identity) Fill: OFF Icon: ON (use default color indicating standard identity) Modifiers: ON
N/A	F	Frame: OFF Fill: ON Icon: ON (use default color indicating standard identity) Modifiers: N/A (civilian sea surface symbols do not permit modifiers) Note: Only land equipment and civilian sea surface symbols can be displayed without a frame. For civilian white-filled icons, the white-fill should be changed to the color indicating its standard identity.
		Frame: ON (black or white depending on background) Fill: ON (use default color indicating standard identity) Icon: OFF Modifiers: OFF Note: The examples show the dimension level display of CARRIER and FERRY. The CARRIER and FERRY icons, including their parent icons, are not displayed.
X	CIV	Frame: ON Fill: ON Icon: ON Modifiers: OFF Note: The examples show the entity level display of CARRIER (MILITARY COMBATANT) and FERRY (CIVILIAN).
•		Frame: ON Fill: ON Icon: ON Modifiers: OFF Note: The examples show the entity type level display of CARRIER and FERRY (MERCHANT SHIP).
0	0	Frame: OFF Fill: ON (use default color indicating standard identity) Icon: OFF Modifiers: OFF
•	•	Frame: OFF Fill: OFF Icon: OFF Modifiers: OFF Note: Use only to indicate the location of a symbol.

Note: This table shows frame and fill color when displayed on a color monitor.

TABLE XV. Color range values for filled symbols.

DECODIDETON	HAND	COMPUTER GENERATED		
DESCRIPTION	DRAWN	DARK	MEDIUM	LIGHT
HOSTILE, SUSPECT, JOKER, FAKER	RED	RGB (200, 0, 0) HSL (0, 255, 100)	RGB (255, 48, 49) HSL (0, 255, 152)	RGB (255, 128, 128) HSL (0, 255, 192)
FRIEND, ASSUMED FRIEND	BLUE	RGB (0, 107, 140) HSL (138, 255, 70)	RGB (0, 168, 220) HSL (138, 255, 110)	RGB (128, 224, 255) HSL (138, 255, 192)
NEUTRAL	GREEN	RGB (0, 160, 0) HSL (85, 255, 80)	RGB (0, 226, 0) HSL (85, 255, 113)	RGB (170, 255, 170) HSL (85, 255, 213)
UNKNOWN, PENDING	YELLOW	RGB (225, 220, 0) HSL (42, 255, 110)	RGB (255, 255, 0) HSL (42, 255, 128)	RGB (255, 255, 128) HSL (42, 255, 192)
CIVILIAN (OPTIONAL FILL)	PURPLE	RGB (80, 0, 80) HSL (213, 255, 40)	RGB (128, 0, 128) HSL (213, 255, 64)	RGB (255, 161, 255) HSL (213, 255, 208)

TABLE XVI. Default colors for unfilled symbols.

DESCRIPTION	HAND DRAWN	COMPUTER GENERATED	
		ICON (RGB VALUE)	ICON COLOR
HOSTILE, SUSPECT, JOKER, FAKER	RED	RED (255, 0, 0)	
FRIEND, ASSUMED FRIEND	BLUE	CYAN (0, 255, 255)	
NEUTRAL	GREEN	NEON GREEN (0, 255, 0)	
UNKNOWN, PENDING	YELLOW	YELLOW (255, 255, 0)	
CIVILIAN (OPTIONAL)	PURPLE	MAGENTA (255, 0, 255)	

6 NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 <u>Intended use</u>. MIL-STD-2525 is designed to enhance DOD's joint interoperability by providing sets of C2 symbols, a coding scheme for symbol automation and information transfer and technical details to support symbology for C2 systems.