Part of the APRS Ptorocol Documentation Version 1.0 (Draft)

SYMBOLS. TXT APRS DISPLAY SYMBOLS Copyright 99

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ABSTRACT

SYMBOLS. TXT Details of all APRS display symbols. (ICONS)

The character after the latitude "N/S" in an APRS position report is a TABLE

character and the character following the longitude "E/W" is the APRS $\mbox{\sc symbol}$

character. The TABLE character selects one of two symbol tables or may be used as a numeric overlay over some symbols as follows:

TABLE RESULT

/ Primary symbol Table (Mostly stations)

\ Alternate symbol table (Mostly Objects)

0-9 Alternate OVERLAY symbol with 0-9 overlaid

A-Z Alternate OVERLAY symbol with A-Z overlaid

For ease of reference we refer to these as the SYMBOL CHARACTERS and often abbreviate them as "/\$" which refers to the Table character "/" and symbol character "\$".

Press F1-S in APRSdos to see these symbols. Some symbols may have a numeric overlay character 0-9 or A-Z. These are shown on the F1-S display with the numeral "3" overlaid. These overlayable symbols are:

CIRCLE, SQUARE, CAR, TRUCK, VAN, DIGIS, GATES
Civil-Defense(RACES), NWS sites, WX stations, Triangle

SYMBOLS WITH STAND-ALONE GPS TRACKERS: Stand-alone TNC trackers which transmit raw GPS have two methods of selecting their symbol. First, by the callsign in their UNPROTO TOADDRESS of the form GPSxyz. The X points to a subgroup table and the Y is the actual symbol. Z is an overlay character if used. Secondly, for MIM trackers which cannot set the UNPROTO address, there are 15 default SSID's which will translate to 15 special Icons.

Actually there are four TOCALLS that will provide the same symbol.

```
GPSxyz is for stand alone trackers
SPCxyz is for stand alone trackers at SPECIAL events in SPCL mode
SYMxyz is for other TNC-only stations such as WX stations
```

Notice that both the /\$ method and GPSxyz method have a one-for-one correspondence for all numeric and alphabetic symbols of both upper and lower case which should make them easy to remember. For the GPSxyz method, we have broken the PRIMARY and ALTERNATE tables into sub tables with different names to make them easier to remember. For example, "/C" is a CANOE in the PRIMARY table which can be referred to as PC in the XYZ format and the "\C" ALTERNATE table symbol is for Coast Guard which could also be referred to in the GPSxyz format as AC. Similarly, you can think of the lower case symbols /c or \c as being LC for lower case C and SC for "secondary" table "c".

The Following Symbol table shows the two types of identifiers for all APRS ICONS. The primary symbols are on the left and the alternate table is on the right. The first column of each is labeled /\$ and \\$ for the primary and alternate tables. These are the characters you will see in an APRS formatted position report. The XYZ columns are for the stand-alone trackers described above.

```
/$
   XYZ BASIC SYMBOL TABLE
                                    \$
                                        XYZ OTHER SYMBOL TABLE (\)
   BB Police, Sheriff
                                    \!
                                        0B
                                            EMERGENCY (!)
/!
                                    \"
   BC reserved (had been rain)
                                        0C
                                            reserved
/#
   BD
       DIGI (white center)
                                    \#
                                        OD# NUMBERED STAR (green)
/$
   BE
       PHONE
                                    \$
                                        0E
                                            Bank or ATM (green box)
/%
   BF
       DX CLUSTER
                                    \%
                                        0F
/&
   BG
       HF GATEway
                                    \&
                                        OG# NUMBERED DI AMOND
/'
                                    \'
   BH
        Small AIRCRAFT (SSID = 7)
                                        OH
                                            Crash site
        CLOUDY
/(
   BI
                                    \(
                                        0I
                                            CLOUDY
   BJ
       avail (Mic moved to m)
                                    /)
                                        0J
/)
                                    \*
                                        OK
/*
   BK
       SnowMobile
                                            SNOW
                                    \+
                                        0L
/+
   BL
       Red Cross
                                            Church
    BM Boy Scouts
                                    ١,
                                        OM Girl Scouts
/,
        House QTH (VHF)
                                        ON
/-
    BN
                                            House (HF)
```

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```
Vicinity Ambiguous Plot (NEW)
    BO
        X
                                            00
                                        ١.
    BP
                                            0P
//
        Dot
                                        \/
/$
    XYZ PRIMARY SYMBOL TABLE
                                        \$
                                            XYZ ALTERNATE SYMBOL TABLE (\)
    --- ------
                                            --- ------
                                        - -
                                        \0
                                            AO# NUMBERED CIRCLE
/0
    PO Numeral circle
/1
    P1
        Numeral circle
                                        \1
                                            A1
/2
                                        \2
                                            A2
    P2
        Numeral circle
/3
    P3
        Numeral circle
                                        \3
                                            A3
/4
    P4
        Numeral circle
                                        \4
                                            A4
/5
                                            A5
    P5
        Numeral circle
                                        \5
/6
    P6
        Numeral circle
                                        \6
                                            A6
/7
    P7
                                        \7
                                            A7
        Numeral circle
/8
    P8
        Numeral circle
                                        \8
                                            A8
/9
    P9
                                        \9
                                            A9
        Numeral circle
                                                 Gas Station (blue pump)
/:
        FI RE
    MR
                                        \:
                                            NR
                                                 Hai l
/:
                                                 Park/Pi cni c area
    MS
        Campground
                                        \:
                                            NS
/<
    МГ
        Motorcycl e
                          (SSID = 10)
                                        \<
                                            NT
                                                 ADVI SORY
/=
        RAILROAD ENGINE
                                            NU
    MU
                                        \=
/>
    MV
        CAR
                          (SSID = 9)
                                        \>
                                            NV# NUMBERED CAR
/?
                                        \?
                                            NW
    MW
        SERVER for Files
                                                 INFO Kiosk (Blue box with?)
/@
    MX
        HC FUTURE predict (dot)
                                            NX
                                                 HURI CANE/Trop-Storm
                                        \@
                                            AA# NUMBERED BOX
    PA
        Aid Station
                                        \backslash A
/A
/B
    PB
        BBS
                                        \backslash B
                                            AB
                                                 Blowing Snow
/C
                                        \C
                                            AC
                                                 Coast Guard
    PC
        Canoe
/D
    PD
                                        \backslash D
                                            AD
                                                 Dri zzl e
/E
    PE
        EYEBALL (Eye catcher)
                                        \E
                                            AE
                                                 Smoke
/F
    PF
                                        \F
                                            AF
                                                 Freezing rain
                                        \backslash G
                                                 Snow Shower
/G
    PG
        Grid Square (6 digit)
                                            AG
/H
    PH
        HOTEL (blue bed symbol)
                                        H
                                            AH
                                                 Haze
    PΙ
        Tcp-Ip
                                        I/
ΑI
                                                 Rain Shower
/J
    PJ
                                        \backslash J
                                            AJ
                                                 Li ghteni ng
/K
    PK
        School
                                        \backslash \mathbf{K}
                                            AK
                                                 Kenwood
/L
    PL
        avai l
                                        \L
                                            AL
                                                 Li ghthouse
/M
    PM
        MacAPRS
                                        \backslash M
                                            AM
                                        \N
/N
    PN
        NTS Station
                                            AN
                                                 Navigation Buoy
/0
    P0
        BALLOON
                                        \0
                                            A0
                          (SSID = 11)
/P
    PP
                                        \backslash P
                                            AP
        Pol i ce
                                                 Parki ng
                                                 QUAKE
/Q
    PQ
        TBD
                                        \0
                                            \mathbf{AQ}
/R
    PR
                                            AR
        REC. VEHICLE
                          (SSID = 13) \setminus R
                                                 Restaurant
```

Part of the APRS Ptorocol Documentation Version 1.0 (Draft) **\S** PS SHUTTLE AS Satellite/Pacsat PT TSSTV TAT Thunderstorm /U PU BUS (SSID = 2) $\setminus U$ ΑU **SUNNY /V** PV ATV **V** AV VORTAC Nav Aid NUMBERED NWS site (NWS options) /W PW National WX Service Site $\backslash W$ AW (SSID = 6)/XPX **HELO** $\backslash X$ AXPharmacy Rx **/Y** PY YACHT (sail) (SSID = 5) $\setminus Y$ AY $/\mathbf{Z}$ Wi nAPRS $\backslash Z$ AZPZ /[HS 1/ DS Wall Cloud Jogger $/ \setminus$ HT TRI ANGLE (DF) \/ DT **PBBS** \] DU /] HU /^ \ ^ DV# NUMBERED Aircraft HV LARGE AI RCRAFT HW WEATHER Station (blue) DW NUMBERED WX site (green digi) /_ DX /` HX Dish Antenna Rai n \\$ /\$ XYZ LOWER CASE SYMBOL TABLE XYZ SECONDARY SYMBOL TABLE (\) --- --------- -------LA AMBULANCE (SSID = 1)\a SA ARRL ARES etc /a BI KE (SSID = 4)SB /b LB \b Blowing Dust/Sand NUMBERED Civil Defense (RACES) /c LC tbd $\backslash c$ SC Dual Garage (Fire dept) SD DX spot by callsign /d LD $\backslash d$ HORSE (equestrian) SE Sleet /e LE **e** FIRE TRUCK \f SF /f LF (SSID = 3)Funnel Cloud Glider SG Gale Flags /g LG \g /h LH **HOSPITAL** \h SH HAM store /i LI IOTA (islands on the air) \i SI Indoor BOXn digipeater (w overlay) LJ JEEP (SSI D- 12) \j SJ WorkZone (Steam Shovel) /j TRUCK (SSID = 14)SK /k LK $\backslash \mathbf{k}$ /1 LL avai l $\backslash 1$ SL Area Locations (box, circles, etc) $/\mathrm{m}$ LM Mic-Repeater SM Value Signpost (3 digit display) $\backslash \mathbf{m}$ /n LN Node nSN# NUMBERED TRIANGLE L0**EOC** S0 small circle /o **\o** LP ROVER (puppy) SP Partly Cloudy /p **\p** GRID SQ shown above 128 m SQ. /q LQ \q /r LR ANTENNA SR \r Restrooms LS SHIP (pwr boat) SSI D- 8) SS# NUMBERED SHIP/boat (top view) /s $\backslash s$ TRUCK STOP \t ST **Tornado** /t LT LU SU# NUMBERED TRUCK /u TRUCK (18 wheeler) \u

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```
LV
         VAN
                              (SSID = 15)
                                               \setminus \mathbf{v}
                                                     SV# NUMBERED Van
/w
    LW WATER station
                                                     SW
                                               \backslash \mathbf{w}
                                                          Fl oodi ng
/x
    LX \times APRS (Uni x)
                                               \backslash \mathbf{x}
                                                     SX
          YAGI @ QTH
                                                     SY
/y
    LY
                                               \y
    LZ
                                                     SZ
/z
                                               \backslash z
/{
    J1
                                                \{
                                                     Q1
                                                          Fog
/| J2
         reserved (Stream Switch)
                                               \|
                                                     Q2
     J3
                                                     Q3
/}
                                               \}
/~
     J3
         reserved (Stream Switch)
                                                     Q4
```

AREA SYMBOLS! You can define BOX/CIRCLE/LINE or TRIANGLE areas in all colors, either open or filled in, any size from 60 feet to 100 miles. Simply move the cursor to the location, press HOME, move the cursor to the lower right corner of the AREA and hit INPUT-ADD-OBJECTS-AREA. Enter the type of area, and color. NOTE that AREA shapes can only be defined by selecting the upper left corner first, then the lower right second. The line is an exception. It is still top to bottom, but the lower point can be to the left of the beginning point. Further, in the line option you may specify a "width" either side of the central line.

These AREAS are useful for real-time events such as for a search-and-rescue, or adding a special ROAD or ROUTE for a special event. Be cautious in using the color fill option, since all other objects in that area that occur earlier in your PLIST will be obscured. AND you do NOT know the order of other stations P-lists.

AREAS FORMAT: The new format for specifying special areas uses the CSE/SPD field to provide the additional information as follows:

```
$CSE/SPD... Normal Field description

1Tyy/Cxx... Where: I (lower case L) is the symbol for "LOCATION SHAPES"

T is the Type of shape: 0=circle, 1=line, 2=elipse
3=triangle 4=box
add 5 to these => color-in

C is the color from 0 to 15. For colors greater than
9, the / is replaced with a 1.

yy is the sqroot of the latitude offset in 1/100ths
xx is the sqroot of the longitude offset
```

These offsets are ALWAYS positive to the right and down, except for the

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special case of a lower right quadrant line, these are given the Type of 6 and are drawn down and to the left.

HURRICANES, TROPICAL STORMS and DEPRESSIONS: These symbols will be differentiated by colors red, yellos, and blue. Additionally a radius of Huricane and also Tropical storm winds will also be shown if the format detailed in WX.txt is used.

SYMBOLS ON MAPS! APRS can also be permanently embedded in maps. To embed a symbol in a map, simply make the first four characters of the label be a # followed by the dual symbol character, followed by a hex number from 1 to F that indicates the color for the symbol. The remaining 8 characters can be used for a conventional label at the same location. An example are the VORTAC nav-aids in Alaska. The Anchorage VORTAC appears as ANC on all maps below 128 miles. The label entry is #\VFANC, LAT, LONG, 128.

VALUE SIGNPOSTS: Signposts display as a yellow box with a 1 to 3 letter overlay on them. You specify the 1-3 letter overlay by enclosing them in braces in the comment field. Thus a VALUE Signpost with {55} would appear as a sign with 55 on it. This was designed for posting the speed of traffic past speed measuring devices. They can be used for any purpose. But to avoid cluttering the map, they ONLY appear at 8 miles and below AND they do not show any callsign or name. Only the yellow box and the 3 letters. Select them from the OBJECT menu under VALUE...