

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 100      | HOME  | EchoStar8 110W TP 08 ConUS beam |
| 101      | DNFYI | EchoStar7 119W TP 17 ConUS beam |
| 102      | TVGC  | EchoStar8 110W TP 02 ConUS beam |
| 103      | ONPPV | EchoStar8 110W TP 19 ConUS beam |
| 105      | USA   | EchoStar7 119W TP 02 ConUS beam |
| 106      | TVLND | EchoStar7 119W TP 13 ConUS beam |
| 107      | CMDY  | EchoStar7 119W TP 13 ConUS beam |
| 108      | LIFE  | EchoStar7 119W TP 13 ConUS beam |
| 109      | LMN   | EchoStar7 119W TP 14 ConUS beam |
| 110      | FOOD  | EchoStar7 119W TP 06 ConUS beam |
| 111      | DIY   | EchoStar8 110W TP 05 ConUS beam |
| 112      | HGTV  | EchoStar7 119W TP 06 ConUS beam |
| 113      | FLVNG | EchoStar8 110W TP 05 ConUS beam |
| 114      | E!    | EchoStar7 119W TP 08 ConUS beam |
| 115      | STYLE | EchoStar8 110W TP 11 ConUS beam |
| 116      | GAME  | EchoStar7 119W TP 08 ConUS beam |
| 118      | AE    | EchoStar7 119W TP 08 ConUS beam |
| 119      | BIOGR | EchoStar8 110W TP 21 ConUS beam |
| 120      | HIST  | EchoStar7 119W TP 02 ConUS beam |
| 121      | HISTI | EchoStar8 110W TP 01 ConUS beam |
| 122      | SCIFI | EchoStar7 119W TP 08 ConUS beam |
| 123      | FREE1 | EchoStar8 110W TP 10 ConUS beam |
| 124      | BET   | EchoStar7 119W TP 02 ConUS beam |
| 126      | BABY  | EchoStar8 110W TP 15 ConUS beam |
| 127      | OXYGN | EchoStar7 119W TP 10 ConUS beam |
| 128      | WE    | EchoStar7 119W TP 12 ConUS beam |
| 129      | BRAVO | EchoStar7 119W TP 02 ConUS beam |
| 130      | AMC   | EchoStar7 119W TP 08 ConUS beam |
| 131      | IFC   | EchoStar7 119W TP 06 ConUS beam |
| 132      | TCM   | EchoStar7 119W TP 13 ConUS beam |
| 133      | FOXMO | EchoStar8 110W TP 11 ConUS beam |
| 135      | BBC   | EchoStar7 119W TP 12 ConUS beam |
| 137      | FX    | EchoStar7 119W TP 12 ConUS beam |
| 138      | TNT   | EchoStar7 119W TP 08 ConUS beam |

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 139      | TBS   | EchoStar7 119W TP 13 ConUS beam |
| 140      | ESPN  | EchoStar7 119W TP 04 ConUS beam |
| 141      | ESP3A | EchoStar8 110W TP 24 ConUS beam |
| 142      | ESNWS | EchoStar7 119W TP 04 ConUS beam |
| 143      | ESPCL | EchoStar7 119W TP 04 ConUS beam |
| 144      | ESPN2 | EchoStar7 119W TP 04 ConUS beam |
| 145      | ESPNA | EchoStar7 119W TP 18 ConUS beam |
| 146      | ESP2A | EchoStar7 119W TP 10 ConUS beam |
| 147      | ESP4A | EchoStar8 110W TP 24 ConUS beam |
| 148      | ESPNU | EchoStar7 119W TP 04 ConUS beam |
| 149      | FSC   | EchoStar8 110W TP 11 ConUS beam |
| 150      | SPEED | EchoStar7 119W TP 17 ConUS beam |
| 151      | VS.   | EchoStar8 110W TP 01 ConUS beam |
| 152      | CSTV  | EchoStar8 110W TP 05 ConUS beam |
| 153      | OTDCH | EchoStar7 119W TP 10 ConUS beam |
| 154      | NFL   | EchoStar7 119W TP 16 ConUS beam |
| 156      | MUSIC | EchoStar8 110W TP 10 ConUS beam |
| 157      | IMF   | EchoStar8 110W TP 03 ConUS beam |
| 158      | FUSE  | EchoStar7 119W TP 02 ConUS beam |
| 159      | SITV  | EchoStar7 119W TP 21 ConUS beam |
| 160      | MTV   | EchoStar7 119W TP 06 ConUS beam |
| 161      | MTV2  | EchoStar7 119W TP 02 ConUS beam |
| 162      | VH1   | EchoStar7 119W TP 13 ConUS beam |
| 163      | VH1CL | EchoStar8 110W TP 21 ConUS beam |
| 166      | CMT   | EchoStar7 119W TP 08 ConUS beam |
| 167      | GAC   | EchoStar8 110W TP 11 ConUS beam |
| 168      | SPIKE | EchoStar7 119W TP 16 ConUS beam |
| 169      | NOG/N | EchoStar7 119W TP 14 ConUS beam |
| 170      | NICK  | EchoStar7 119W TP 16 ConUS beam |
| 171      | NICKW | EchoStar7 119W TP 16 ConUS beam |
| 172      | DISE  | EchoStar7 119W TP 12 ConUS beam |
| 173      | DISW  | EchoStar7 119W TP 04 ConUS beam |
| 174      | TDIS  | EchoStar7 119W TP 06 ConUS beam |
| 175      | BOOM  | EchoStar8 110W TP 15 ConUS beam |

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 176      | TOON  | EchoStar7 119W TP 16 ConUS beam |
| 177      | NICKG | EchoStar8 110W TP 15 ConUS beam |
| 178      | NICKT | EchoStar8 110W TP 15 ConUS beam |
| 179      | DKIDS | EchoStar8 110W TP 15 ConUS beam |
| 180      | ABCFM | EchoStar7 119W TP 02 ConUS beam |
| 181      | ION   | EchoStar7 119W TP 14 ConUS beam |
| 182      | DISC  | EchoStar7 119W TP 08 ConUS beam |
| 183      | TLC   | EchoStar7 119W TP 08 ConUS beam |
| 184      | ANIML | EchoStar7 119W TP 02 ConUS beam |
| 185      | HLMRK | EchoStar8 110W TP 11 ConUS beam |
| 186      | NTGEO | EchoStar8 110W TP 11 ConUS beam |
| 187      | HMC   | EchoStar8 110W TP 03 ConUS beam |
| 188      | SOAP  | EchoStar8 110W TP 11 ConUS beam |
| 189      | DHLTH | EchoStar7 119W TP 17 ConUS beam |
| 190      | REAL  | EchoStar8 110W TP 05 ConUS beam |
| 191      | G4    | EchoStar7 119W TP 12 ConUS beam |
| 192      | DTIME | EchoStar8 110W TP 09 ConUS beam |
| 193      | SCIEN | EchoStar8 110W TP 15 ConUS beam |
| 194      | DHOME | EchoStar8 110W TP 19 ConUS beam |
| 195      | MLTRY | EchoStar8 110W TP 21 ConUS beam |
| 196      | CRNTV | EchoStar8 110W TP 19 ConUS beam |
| 197      | DOC   | EchoStar8 110W TP 03 ConUS beam |
| 198      | SLTH  | EchoStar8 110W TP 19 ConUS beam |
| 200      | CNN   | EchoStar7 119W TP 19 ConUS beam |
| 202      | HNN   | EchoStar7 119W TP 19 ConUS beam |
| 203      | BITV  | EchoStar8 110W TP 02 ConUS beam |
| 204      | COURT | EchoStar7 119W TP 02 ConUS beam |
| 205      | FXNWS | EchoStar7 119W TP 06 ConUS beam |
| 207      | CNBCW | EchoStar8 110W TP 05 ConUS beam |
| 208      | CNBC  | EchoStar7 119W TP 13 ConUS beam |
| 209      | MSNBC | EchoStar7 119W TP 13 ConUS beam |
| 210      | CSPAN | EchoStar7 119W TP 11 ConUS beam |
| 212      | CSPN2 | EchoStar7 119W TP 11 ConUS beam |
| 213      | NASA  | EchoStar7 119W TP 11 ConUS beam |

| Channel# | Name  | Satellite/Beam                      |
|----------|-------|-------------------------------------|
| 214      | TWC   | EchoStar7 119W TP 06 ConUS beam     |
| 215      | TRAV  | EchoStar7 119W TP 06 ConUS beam     |
| 216      | RR    | EchoStar8 110W TP 10 ConUS beam     |
| 217      | WATER | EchoStar8 110W TP 14 ConUS beam     |
| 218      | MOR   | EchoStar8 110W TP 10 ConUS beam     |
| 219      | MENS2 | EchoStar8 110W TP 10 ConUS beam     |
| 221      | DRIVE | EchoStar8 110W TP 10 ConUS beam     |
| 222      | HSN   | EchoStar7 119W TP 11 ConUS beam     |
| 223      | HLC   | EchoStar8 110W TP 10 ConUS beam     |
| 224      | SHOP  | EchoStar7 119W TP 11 ConUS beam     |
| 225      | BE    | EchoStar7 119W TP 11 ConUS beam     |
| 226      | QVC   | EchoStar7 119W TP 11 ConUS beam     |
| 227      | JTV   | EchoStar8 110W TP 03 ConUS beam     |
| 228      | SHNBC | EchoStar7 119W TP 11 ConUS beam     |
| 229      | ISHOP | EchoStar8 110W TP 16 ConUS beam     |
| 232      | KTLA  | EchoStar7 119W TP 20 ConUS beam     |
| 234      | WPIX  | EchoStar7 119W TP 20 ConUS beam     |
| 235      | KWGN  | EchoStar7 119W TP 20 ConUS beam     |
| 236      | WSBK  | EchoStar7 119W TP 20 ConUS beam     |
| 237      | WNET  | EchoStar7 119W TP 01 Northeast beam |
| 238      | WWOR  | EchoStar7 119W TP 20 ConUS beam     |
| 239      | WGN   | EchoStar7 119W TP 18 ConUS beam     |
| 240      | INFO  | EchoStar7 119W TP 15 ConUS beam     |
| 241      | WXIA  | EchoStar7 119W TP 15 ConUS beam     |
| 242      | KNTV  | EchoStar7 119W TP 15 ConUS beam     |
| 243      | WGCL  | EchoStar7 119W TP 15 ConUS beam     |
| 244      | KPIX  | EchoStar7 119W TP 15 ConUS beam     |
| 245      | WSB   | EchoStar7 119W TP 15 ConUS beam     |
| 246      | KGO   | EchoStar7 119W TP 15 ConUS beam     |
| 247      | WAGA  | EchoStar7 119W TP 15 ConUS beam     |
| 248      | KTVU  | EchoStar7 119W TP 15 ConUS beam     |
| 249      | PBS   | EchoStar7 119W TP 08 ConUS beam     |
| 250      | INFO  | EchoStar7 119W TP 15 ConUS beam     |
| 251      | WPIX  | EchoStar7 119W TP 20 ConUS beam     |

| Channel# | Name      | Satellite/Beam                  |
|----------|-----------|---------------------------------|
| 252      | KTLA      | EchoStar7 119W TP 20 ConUS beam |
| 254      | CW        | EchoStar7 119W TP 16 ConUS beam |
| 255      | CW-W      | EchoStar7 119W TP 21 ConUS beam |
| 257      | SPRKY(NA) | EchoStar5 129W TP 17 ConUS beam |
| 258      | INFO(NA)  | EchoStar5 129W TP 17 ConUS beam |
| 259      | INFO9(NA) | EchoStar5 129W TP 17 ConUS beam |
| 260      | TBN       | EchoStar7 119W TP 11 ConUS beam |
| 261      | EWTN      | EchoStar7 119W TP 11 ConUS beam |
| 262      | ANGEL     | EchoStar7 119W TP 21 ConUS beam |
| 263      | DYSTR     | EchoStar8 110W TP 05 ConUS beam |
| 265      | CCTV9     | EchoStar8 110W TP 22 ConUS beam |
| 270      | UNVSN     | EchoStar7 119W TP 02 ConUS beam |
| 271      | FTRAE     | EchoStar8 110W TP 01 ConUS beam |
| 272      | FTRAW     | EchoStar8 110W TP 01 ConUS beam |
| 273      | GLVSN     | EchoStar7 119W TP 02 ConUS beam |
| 280      | FREE      | EchoStar8 110W TP 02 ConUS beam |
| 281      | ANIML     | EchoStar7 119W TP 02 ConUS beam |
| 282      | ION       | EchoStar7 119W TP 14 ConUS beam |
| 283      | TDIS      | EchoStar7 119W TP 06 ConUS beam |
| 284      | HLMRK     | EchoStar8 110W TP 11 ConUS beam |
| 285      | MUN2      | EchoStar8 110W TP 09 ConUS beam |
| 286      | REAL      | EchoStar8 110W TP 05 ConUS beam |
| 289      | FREE      | EchoStar8 110W TP 02 ConUS beam |
| 299      | REELZ     | EchoStar7 119W TP 11 ConUS beam |
| 300      | HBO-E     | EchoStar7 119W TP 02 ConUS beam |
| 301      | HBO2E     | EchoStar7 119W TP 06 ConUS beam |
| 302      | HBOSG     | EchoStar7 119W TP 06 ConUS beam |
| 303      | HBO-W     | EchoStar7 119W TP 19 ConUS beam |
| 304      | HBO2W     | EchoStar7 119W TP 13 ConUS beam |
| 305      | HBOFM     | EchoStar7 119W TP 08 ConUS beam |
| 307      | HBOCY     | EchoStar8 110W TP 11 ConUS beam |
| 308      | FREE6     | EchoStar8 110W TP 10 ConUS beam |
| 309      | HBOLT     | EchoStar8 110W TP 21 ConUS beam |
| 310      | MAX-E     | EchoStar7 119W TP 17 ConUS beam |

| Channel# | Name      | Satellite/Beam                  |
|----------|-----------|---------------------------------|
| 311      | MAX-W     | EchoStar7 119W TP 13 ConUS beam |
| 312      | MOMAX     | EchoStar7 119W TP 17 ConUS beam |
| 313      | ACMAX     | EchoStar8 110W TP 11 ConUS beam |
| 314      | 5-MAX     | EchoStar8 110W TP 11 ConUS beam |
| 318      | SHO-E     | EchoStar7 119W TP 06 ConUS beam |
| 319      | SHO-W     | EchoStar7 119W TP 08 ConUS beam |
| 320      | SHOTO     | EchoStar7 119W TP 19 ConUS beam |
| 321      | SHOCS     | EchoStar8 110W TP 21 ConUS beam |
| 322      | SHOEX     | EchoStar7 119W TP 10 ConUS beam |
| 323      | SBYND     | EchoStar8 110W TP 11 ConUS beam |
| 324      | FREE7     | EchoStar8 110W TP 10 ConUS beam |
| 327      | TMC-E     | EchoStar7 119W TP 10 ConUS beam |
| 328      | TMCXE     | EchoStar7 119W TP 10 ConUS beam |
| 329      | TMC-W     | EchoStar8 110W TP 21 ConUS beam |
| 330      | TMCXW     | EchoStar8 110W TP 21 ConUS beam |
| 332      | SUND      | EchoStar7 119W TP 12 ConUS beam |
| 333      | FLIX      | EchoStar7 119W TP 17 ConUS beam |
| 340      | ENCOR     | EchoStar7 119W TP 14 ConUS beam |
| 341      | ENCRW     | EchoStar8 110W TP 15 ConUS beam |
| 342      | EWSTN     | EchoStar7 119W TP 14 ConUS beam |
| 343      | EACTN     | EchoStar8 110W TP 19 ConUS beam |
| 344      | EMYST     | EchoStar8 110W TP 01 ConUS beam |
| 345      | EDRAM     | EchoStar8 110W TP 01 ConUS beam |
| 346      | ELOVE     | EchoStar8 110W TP 01 ConUS beam |
| 347      | EWAM      | EchoStar8 110W TP 01 ConUS beam |
| 350      | STARZ     | EchoStar7 119W TP 14 ConUS beam |
| 351      | STRZW     | EchoStar8 110W TP 15 ConUS beam |
| 352      | SEdge     | EchoStar7 119W TP 14 ConUS beam |
| 353      | SCINE     | EchoStar7 119W TP 14 ConUS beam |
| 354      | STZC      | EchoStar8 110W TP 11 ConUS beam |
| 355      | SBLCK     | EchoStar7 119W TP 14 ConUS beam |
| 356      | SKEM      | EchoStar7 119W TP 14 ConUS beam |
| 359      | CSNWS(NA) | EchoStar5 129W TP 08 ConUS beam |
| 360      | ALTUD(NA) | EchoStar5 129W TP 08 ConUS beam |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 362      | MSG(NA)   | EchoStar3 61.5W TP 30 ConUS beam |
| 363      | FOXNY(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 365      | FOXAZ(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 366      | FOXSW(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 367      | FOXW(NA)  | EchoStar5 129W TP 08 ConUS beam  |
| 369      | FOXBA(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 370      | FOXSN(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 372      | SUN(NA)   | EchoStar3 61.5W TP 30 ConUS beam |
| 374      | CSNMA(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 374      | CSNMA(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 376      | FOXNW(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 379      | CSNCH(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 385      | FOXNE(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 386      | FOXN(NA)  | EchoStar5 129W TP 08 ConUS beam  |
| 387      | NHLHD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 388      | NHLHD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 389      | NHLHD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 390      | NHLHD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 391      | NHLHD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 392      | NHLHD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 393      | NHLHD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 394      | NBAHD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 395      | NBAHD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 396      | NBAHD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 397      | NBAHD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 398      | NBAHD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 399      | NBAHD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 400      | TENIS     | EchoStar8 110W TP 05 ConUS beam  |
| 401      | GOLF      | EchoStar8 110W TP 09 ConUS beam  |
| 402      | NBATV     | EchoStar8 110W TP 01 ConUS beam  |
| 404      | HRTV      | EchoStar8 110W TP 15 ConUS beam  |
| 405      | TVGAM     | EchoStar7 119W TP 17 ConUS beam  |
| 407      | GOLTV     | EchoStar8 110W TP 09 ConUS beam  |
| 409      | CSNWS     | EchoStar8 110W TP 16 ConUS beam  |

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 410      | ALTUD | EchoStar7 119W TP 21 ConUS beam |
| 411      | PRIME | EchoStar8 110W TP 16 ConUS beam |
| 412      | MSG   | EchoStar7 119W TP 21 ConUS beam |
| 413      | FOXNY | EchoStar7 119W TP 10 ConUS beam |
| 414      | FOXRM | EchoStar7 119W TP 17 ConUS beam |
| 415      | FOXAZ | EchoStar7 119W TP 21 ConUS beam |
| 416      | FOXSW | EchoStar7 119W TP 17 ConUS beam |
| 417      | FOXW  | EchoStar7 119W TP 21 ConUS beam |
| 418      | FOXMW | EchoStar7 119W TP 18 ConUS beam |
| 419      | FOXBA | EchoStar7 119W TP 10 ConUS beam |
| 420      | FOXSN | EchoStar7 119W TP 10 ConUS beam |
| 422      | SUN   | EchoStar7 119W TP 12 ConUS beam |
| 423      | FOXFL | EchoStar7 119W TP 21 ConUS beam |
| 424      | CSNMA | EchoStar7 119W TP 18 ConUS beam |
| 425      | FOXOH | EchoStar7 119W TP 21 ConUS beam |
| 426      | FOXNW | EchoStar7 119W TP 10 ConUS beam |
| 427      | FOXCN | EchoStar7 119W TP 18 ConUS beam |
| 428      | FOXPT | EchoStar7 119W TP 12 ConUS beam |
| 429      | CSNCH | EchoStar7 119W TP 17 ConUS beam |
| 430      | FOXDN | EchoStar7 119W TP 12 ConUS beam |
| 431      | STO   | EchoStar8 110W TP 24 ConUS beam |
| 434      | NESN  | EchoStar7 119W TP 21 ConUS beam |
| 435      | FOXNE | EchoStar7 119W TP 14 ConUS beam |
| 436      | FOXN  | EchoStar7 119W TP 18 ConUS beam |
| 437      | SPSOU | EchoStar8 110W TP 16 ConUS beam |
| 438      | SNY   | EchoStar7 119W TP 18 ConUS beam |
| 444      | ALT   | EchoStar7 119W TP 12 ConUS beam |
| 445      | ALT   | EchoStar8 110W TP 24 ConUS beam |
| 446      | ALT   | EchoStar8 110W TP 24 ConUS beam |
| 447      | ALT   | EchoStar8 110W TP 24 ConUS beam |
| 448      | ALT   | EchoStar8 110W TP 24 ConUS beam |
| 449      | ALT   | EchoStar8 110W TP 24 ConUS beam |
| 450      | ALT   | EchoStar8 110W TP 24 ConUS beam |
| 451      | ALT   | EchoStar8 110W TP 24 ConUS beam |



| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 452      | ALT   | EchoStar8 110W TP 16 ConUS beam  |
| 453      | ALT   | EchoStar7 119W TP 18 ConUS beam  |
| 454      | SPORT | EchoStar7 119W TP 10 ConUS beam  |
| 455      | SPORT | EchoStar7 119W TP 13 ConUS beam  |
| 456      | SPORT | EchoStar8 110W TP 06 ConUS beam  |
| 457      | SPORT | EchoStar8 110W TP 02 ConUS beam  |
| 458      | SPORT | EchoStar8 110W TP 14 ConUS beam  |
| 459      | SPORT | EchoStar8 110W TP 24 ConUS beam  |
| 460      | SPORT | EchoStar7 119W TP 16 ConUS beam  |
| 461      | SPORT | EchoStar8 110W TP 16 ConUS beam  |
| 462      | SPORT | EchoStar8 110W TP 02 ConUS beam  |
| 463      | SPORT | EchoStar8 110W TP 02 ConUS beam  |
| 464      | SPORT | EchoStar8 110W TP 02 ConUS beam  |
| 465      | SPORT | EchoStar7 119W TP 18 ConUS beam  |
| 466      | SPORT | EchoStar7 119W TP 10 ConUS beam  |
| 467      | ORDER | EchoStar8 110W TP 06 ConUS beam  |
| 471      | SPORT | EchoStar1 148W TP 09 ConUS beam  |
| 471      | SPORT | EchoStar3 61.5W TP 08 ConUS beam |
| 472      | SPORT | EchoStar2 148W TP 26 ConUS beam  |
| 472      | SPORT | Rainbow 1 61.5W TP 23 ConUS beam |
| 480      | ALOCK | EchoStar7 119W TP 17 ConUS beam  |
| 481      | PPV   | EchoStar8 110W TP 24 ConUS beam  |
| 482      | PPV   | EchoStar7 119W TP 16 ConUS beam  |
| 483      | PPV   | EchoStar8 110W TP 16 ConUS beam  |
| 484      | PPV   | EchoStar8 110W TP 02 ConUS beam  |
| 485      | ASHOW | EchoStar8 110W TP 10 ConUS beam  |
| 486      | JENNA | EchoStar7 119W TP 16 ConUS beam  |
| 487      | TEEZ  | EchoStar8 110W TP 03 ConUS beam  |
| 488      | TCLIP | EchoStar8 110W TP 03 ConUS beam  |
| 489      | TEN   | EchoStar7 119W TP 04 ConUS beam  |
| 490      | ALOCK | EchoStar7 119W TP 17 ConUS beam  |
| 492      | XCESS | EchoStar8 110W TP 19 ConUS beam  |
| 494      | CLIPS | EchoStar8 110W TP 03 ConUS beam  |
| 495      | TEN   | EchoStar7 119W TP 04 ConUS beam  |

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 496      | XTSY  | EchoStar7 119W TP 14 ConUS beam |
| 497      | PLBY  | EchoStar7 119W TP 04 ConUS beam |
| 498      | PLBYE | EchoStar8 110W TP 09 ConUS beam |
| 499      | FRESH | EchoStar8 110W TP 21 ConUS beam |
| 500      | ONPPV | EchoStar8 110W TP 19 ConUS beam |
| 501      | ORDER | EchoStar7 119W TP 11 ConUS beam |
| 502      | PPV   | EchoStar7 119W TP 06 ConUS beam |
| 503      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 504      | PPV   | EchoStar8 110W TP 06 ConUS beam |
| 505      | PPV   | EchoStar7 119W TP 16 ConUS beam |
| 506      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 507      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 508      | PPV   | EchoStar8 110W TP 06 ConUS beam |
| 509      | PPV   | EchoStar7 119W TP 17 ConUS beam |
| 510      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 511      | PPV   | EchoStar8 110W TP 16 ConUS beam |
| 512      | PPV   | EchoStar8 110W TP 16 ConUS beam |
| 513      | PPV   | EchoStar8 110W TP 16 ConUS beam |
| 514      | PPV   | EchoStar8 110W TP 06 ConUS beam |
| 515      | PPV   | EchoStar8 110W TP 16 ConUS beam |
| 516      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 517      | PPV   | EchoStar8 110W TP 02 ConUS beam |
| 518      | PPV   | EchoStar8 110W TP 06 ConUS beam |
| 519      | PPV   | EchoStar8 110W TP 10 ConUS beam |
| 520      | PPV   | EchoStar8 110W TP 14 ConUS beam |
| 521      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 522      | PPV   | EchoStar8 110W TP 06 ConUS beam |
| 523      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 524      | PPV   | EchoStar8 110W TP 08 ConUS beam |
| 525      | PPV   | EchoStar8 110W TP 14 ConUS beam |
| 526      | PPV   | EchoStar8 110W TP 14 ConUS beam |
| 527      | PPV   | EchoStar8 110W TP 14 ConUS beam |
| 528      | PPV   | EchoStar8 110W TP 14 ConUS beam |
| 529      | PPV   | EchoStar8 110W TP 14 ConUS beam |

| Channel# | Name   | Satellite/Beam                   |
|----------|--------|----------------------------------|
| 530      | PPV    | EchoStar8 110W TP 14 ConUS beam  |
| 532      | PPV    | EchoStar8 110W TP 14 ConUS beam  |
| 533      | PPV    | EchoStar2 148W TP 26 ConUS beam  |
| 533      | PPV    | Rainbow 1 61.5W TP 23 ConUS beam |
| 538      | \$1.99 | EchoStar8 110W TP 06 ConUS beam  |
| 540      | NHL    | EchoStar8 110W TP 16 ConUS beam  |
| 541      | NHL    | EchoStar7 119W TP 10 ConUS beam  |
| 542      | NHL    | EchoStar7 119W TP 21 ConUS beam  |
| 543      | NHL    | EchoStar8 110W TP 16 ConUS beam  |
| 544      | NHL    | EchoStar7 119W TP 18 ConUS beam  |
| 545      | NHL    | EchoStar8 110W TP 24 ConUS beam  |
| 546      | NHL    | EchoStar7 119W TP 12 ConUS beam  |
| 547      | NHL    | EchoStar8 110W TP 24 ConUS beam  |
| 548      | NHL    | EchoStar8 110W TP 24 ConUS beam  |
| 549      | NHL    | EchoStar7 119W TP 12 ConUS beam  |
| 550      | NHL    | EchoStar8 110W TP 24 ConUS beam  |
| 551      | NHL    | EchoStar7 119W TP 18 ConUS beam  |
| 552      | NHL    | EchoStar7 119W TP 10 ConUS beam  |
| 553      | NHL    | EchoStar7 119W TP 18 ConUS beam  |
| 554      | NHL    | EchoStar7 119W TP 21 ConUS beam  |
| 555      | NHL    | EchoStar7 119W TP 12 ConUS beam  |
| 556      | NHL    | EchoStar8 110W TP 24 ConUS beam  |
| 557      | NHL    | EchoStar8 110W TP 24 ConUS beam  |
| 558      | NHL    | EchoStar8 110W TP 16 ConUS beam  |
| 560      | NBATV  | EchoStar8 110W TP 01 ConUS beam  |
| 561      | NBA    | EchoStar7 119W TP 12 ConUS beam  |
| 562      | NBA    | EchoStar7 119W TP 21 ConUS beam  |
| 563      | NBA    | EchoStar8 110W TP 24 ConUS beam  |
| 564      | NBA    | EchoStar7 119W TP 21 ConUS beam  |
| 565      | NBA    | EchoStar8 110W TP 16 ConUS beam  |
| 566      | NBA    | EchoStar8 110W TP 24 ConUS beam  |
| 567      | NBA    | EchoStar8 110W TP 24 ConUS beam  |
| 568      | NBA    | EchoStar7 119W TP 21 ConUS beam  |
| 569      | NBA    | EchoStar7 119W TP 21 ConUS beam  |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 570      | NBA   | EchoStar7 119W TP 21 ConUS beam  |
| 571      | NBA   | EchoStar8 110W TP 16 ConUS beam  |
| 572      | NBA   | EchoStar7 119W TP 18 ConUS beam  |
| 573      | FPCHN | EchoStar1 148W TP 25 ConUS beam  |
| 573      | FPCHN | EchoStar3 61.5W TP 12 ConUS beam |
| 577      | PFC   | EchoStar1 148W TP 03 ConUS beam  |
| 577      | PFC   | EchoStar3 61.5W TP 10 ConUS beam |
| 578      | BRDGS | EchoStar2 148W TP 24 ConUS beam  |
| 578      | BRDGS | Rainbow 1 61.5W TP 15 ConUS beam |
| 579      | INTER | EchoStar1 148W TP 29 ConUS beam  |
| 579      | INTER | EchoStar3 61.5W TP 31 ConUS beam |
| 580      | INFO  | EchoStar2 148W TP 26 ConUS beam  |
| 580      | INFO  | Rainbow 1 61.5W TP 23 ConUS beam |
| 581      | PHNIX | EchoStar1 148W TP 01 ConUS beam  |
| 581      | PHNIX | EchoStar3 61.5W TP 27 ConUS beam |
| 582      | CCTV4 | EchoStar2 148W TP 24 ConUS beam  |
| 582      | CCTV4 | Rainbow 1 61.5W TP 15 ConUS beam |
| 583      | ASIFM | EchoStar1 148W TP 01 ConUS beam  |
| 583      | ASIFM | EchoStar3 61.5W TP 27 ConUS beam |
| 584      | SAMAY | EchoStar1 148W TP 25 ConUS beam  |
| 584      | SAMAY | EchoStar3 61.5W TP 12 ConUS beam |
| 585      | AAJTK | EchoStar1 148W TP 25 ConUS beam  |
| 585      | AAJTK | EchoStar3 61.5W TP 12 ConUS beam |
| 586      | HT    | EchoStar1 148W TP 25 ConUS beam  |
| 586      | HT    | EchoStar3 61.5W TP 12 ConUS beam |
| 587      | ATV   | EchoStar1 148W TP 01 ConUS beam  |
| 587      | ATV   | EchoStar3 61.5W TP 27 ConUS beam |
| 588      | BLUE  | EchoStar1 148W TP 27 ConUS beam  |
| 588      | BLUE  | EchoStar3 61.5W TP 16 ConUS beam |
| 589      | ANTGO | EchoStar1 148W TP 27 ConUS beam  |
| 589      | ANTGO | EchoStar3 61.5W TP 16 ConUS beam |
| 590      | TRACE | EchoStar1 148W TP 25 ConUS beam  |
| 590      | TRACE | EchoStar3 61.5W TP 12 ConUS beam |
| 591      | TELSA | EchoStar1 148W TP 25 ConUS beam  |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 591      | TELSD | EchoStar3 61.5W TP 12 ConUS beam |
| 592      | RTVI  | EchoStar1 148W TP 07 ConUS beam  |
| 592      | RTVI  | EchoStar3 61.5W TP 14 ConUS beam |
| 593      | RTVI+ | EchoStar1 148W TP 07 ConUS beam  |
| 593      | RTVI+ | EchoStar3 61.5W TP 14 ConUS beam |
| 594      | HTBA  | EchoStar1 148W TP 07 ConUS beam  |
| 594      | HTBA  | EchoStar3 61.5W TP 14 ConUS beam |
| 595      | TVCI  | EchoStar1 148W TP 07 ConUS beam  |
| 595      | TVCI  | EchoStar3 61.5W TP 14 ConUS beam |
| 596      | GLOBO | EchoStar1 148W TP 11 ConUS beam  |
| 596      | GLOBO | EchoStar3 61.5W TP 18 ConUS beam |
| 597      | RCORD | EchoStar1 148W TP 11 ConUS beam  |
| 597      | RCORD | EchoStar3 61.5W TP 18 ConUS beam |
| 598      | RBTI  | EchoStar1 148W TP 27 ConUS beam  |
| 598      | RBTI  | EchoStar3 61.5W TP 18 ConUS beam |
| 599      | SICNO | EchoStar1 148W TP 29 ConUS beam  |
| 599      | SICNO | EchoStar3 61.5W TP 31 ConUS beam |
| 600      | RAI   | EchoStar7 119W TP 04 ConUS beam  |
| 601      | RAI   | EchoStar2 148W TP 24 ConUS beam  |
| 601      | RAI   | Rainbow 1 61.5W TP 15 ConUS beam |
| 602      | MEGA  | EchoStar1 148W TP 07 ConUS beam  |
| 602      | MEGA  | EchoStar3 61.5W TP 14 ConUS beam |
| 603      | ERT   | EchoStar1 148W TP 07 ConUS beam  |
| 603      | ERT   | EchoStar3 61.5W TP 14 ConUS beam |
| 604      | KINO  | EchoStar1 148W TP 07 ConUS beam  |
| 604      | KINO  | EchoStar3 61.5W TP 14 ConUS beam |
| 605      | ANTEN | EchoStar1 148W TP 27 ConUS beam  |
| 605      | ANTEN | EchoStar3 61.5W TP 16 ConUS beam |
| 606      | TV5   | EchoStar1 148W TP 01 ConUS beam  |
| 606      | TV5   | EchoStar3 61.5W TP 27 ConUS beam |
| 607      | PLSAT | EchoStar1 148W TP 19 ConUS beam  |
| 607      | PLSAT | EchoStar3 61.5W TP 29 ConUS beam |
| 608      | ITVN  | EchoStar1 148W TP 09 ConUS beam  |
| 608      | ITVN  | EchoStar3 61.5W TP 08 ConUS beam |

| Channel# | Name    | Satellite/Beam                   |
|----------|---------|----------------------------------|
| 609      | TVN24   | EchoStar1 148W TP 07 ConUS beam  |
| 609      | TVN24   | EchoStar3 61.5W TP 14 ConUS beam |
| 610      | SUNTV   | EchoStar1 148W TP 11 ConUS beam  |
| 610      | SUNTV   | EchoStar3 61.5W TP 18 ConUS beam |
| 611      | ZEETV   | EchoStar1 148W TP 01 ConUS beam  |
| 611      | ZEETV   | EchoStar3 61.5W TP 27 ConUS beam |
| 612      | SETMX   | EchoStar1 148W TP 11 ConUS beam  |
| 612      | SETMX   | EchoStar3 61.5W TP 18 ConUS beam |
| 613      | TVASA   | EchoStar1 148W TP 11 ConUS beam  |
| 613      | TVASA   | EchoStar3 61.5W TP 18 ConUS beam |
| 614      | SET     | EchoStar1 148W TP 11 ConUS beam  |
| 614      | SET     | EchoStar3 61.5W TP 18 ConUS beam |
| 615      | RTPI    | EchoStar1 148W TP 19 ConUS beam  |
| 615      | RTPI    | EchoStar3 61.5W TP 29 ConUS beam |
| 616      | PTV     | EchoStar1 148W TP 09 ConUS beam  |
| 616      | PTV     | EchoStar3 61.5W TP 08 ConUS beam |
| 617      | ZCINE   | EchoStar1 148W TP 01 ConUS beam  |
| 617      | ZCINE   | EchoStar3 61.5W TP 27 ConUS beam |
| 618      | B4UMU   | EchoStar1 148W TP 09 ConUS beam  |
| 618      | B4UMU   | EchoStar3 61.5W TP 08 ConUS beam |
| 619      | B4U     | EchoStar1 148W TP 01 ConUS beam  |
| 619      | B4U     | EchoStar3 61.5W TP 27 ConUS beam |
| 620      | GEOTV   | EchoStar1 148W TP 19 ConUS beam  |
| 620      | GEOTV   | EchoStar3 61.5W TP 29 ConUS beam |
| 621      | ARYDI   | EchoStar1 148W TP 09 ConUS beam  |
| 621      | ARYDI   | EchoStar3 61.5W TP 08 ConUS beam |
| 622      | APUNJ   | EchoStar1 148W TP 25 ConUS beam  |
| 622      | APUNJ   | EchoStar3 61.5W TP 12 ConUS beam |
| 623      | ZGUJ    | EchoStar1 148W TP 25 ConUS beam  |
| 623      | ZGUJ    | EchoStar3 61.5W TP 12 ConUS beam |
| 624      | SHARA   | EchoStar1 148W TP 25 ConUS beam  |
| 624      | SHARA   | EchoStar3 61.5W TP 12 ConUS beam |
| 625      | MLB     | EchoStar8 110W TP 16 ConUS beam  |
| 626      | MLB(NA) | EchoStar7 119W TP 12 ConUS beam  |

| Channel# | Name    | Satellite/Beam                   |
|----------|---------|----------------------------------|
| 627      | MLB(NA) | EchoStar7 119W TP 18 ConUS beam  |
| 628      | MLB(NA) | EchoStar7 119W TP 12 ConUS beam  |
| 629      | MLB(NA) | EchoStar8 110W TP 24 ConUS beam  |
| 630      | MLB(NA) | EchoStar7 119W TP 12 ConUS beam  |
| 631      | MLB(NA) | EchoStar8 110W TP 16 ConUS beam  |
| 632      | MLB(NA) | EchoStar7 119W TP 17 ConUS beam  |
| 633      | MLB(NA) | EchoStar7 119W TP 10 ConUS beam  |
| 634      | MLB(NA) | EchoStar7 119W TP 10 ConUS beam  |
| 635      | MLB(NA) | EchoStar7 119W TP 21 ConUS beam  |
| 636      | MLB(NA) | EchoStar7 119W TP 18 ConUS beam  |
| 637      | MLB(NA) | EchoStar7 119W TP 10 ConUS beam  |
| 638      | MLB(NA) | EchoStar7 119W TP 21 ConUS beam  |
| 639      | MLB(NA) | EchoStar8 110W TP 16 ConUS beam  |
| 640      | TVJPN   | EchoStar1 148W TP 11 ConUS beam  |
| 640      | TVJPN   | EchoStar3 61.5W TP 18 ConUS beam |
| 641      | TVJPN   | EchoStar7 119W TP 09 Hawaii beam |
| 642      | ART     | EchoStar1 148W TP 01 ConUS beam  |
| 642      | ART     | EchoStar3 61.5W TP 27 ConUS beam |
| 643      | ARTMV   | EchoStar1 148W TP 01 ConUS beam  |
| 643      | ARTMV   | EchoStar3 61.5W TP 27 ConUS beam |
| 644      | LBC     | EchoStar2 148W TP 24 ConUS beam  |
| 644      | LBC     | Rainbow 1 61.5W TP 15 ConUS beam |
| 645      | ALJAZ   | EchoStar2 148W TP 24 ConUS beam  |
| 645      | ALJAZ   | Rainbow 1 61.5W TP 15 ConUS beam |
| 646      | ESC-1   | EchoStar1 148W TP 09 ConUS beam  |
| 646      | ESC-1   | EchoStar3 61.5W TP 08 ConUS beam |
| 647      | NILE    | EchoStar1 148W TP 09 ConUS beam  |
| 647      | NILE    | EchoStar3 61.5W TP 08 ConUS beam |
| 648      | FUTUR   | EchoStar1 148W TP 09 ConUS beam  |
| 648      | FUTUR   | EchoStar3 61.5W TP 08 ConUS beam |
| 649      | DUBAI   | EchoStar1 148W TP 09 ConUS beam  |
| 649      | DUBAI   | EchoStar3 61.5W TP 08 ConUS beam |
| 650      | SPT     | EchoStar1 148W TP 29 ConUS beam  |
| 650      | SPT     | EchoStar3 61.5W TP 31 ConUS beam |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 651      | ARYOW | EchoStar1 148W TP 29 ConUS beam  |
| 651      | ARYOW | EchoStar3 61.5W TP 31 ConUS beam |
| 652      | KBS   | EchoStar1 148W TP 11 ConUS beam  |
| 652      | KBS   | EchoStar3 61.5W TP 18 ConUS beam |
| 653      | ARANG | EchoStar2 148W TP 24 ConUS beam  |
| 653      | ARANG | Rainbow 1 61.5W TP 15 ConUS beam |
| 654      | JSTV  | EchoStar1 148W TP 25 ConUS beam  |
| 654      | JSTV  | EchoStar3 61.5W TP 12 ConUS beam |
| 655      | WOWTV | EchoStar1 148W TP 09 ConUS beam  |
| 655      | WOWTV | EchoStar3 61.5W TP 08 ConUS beam |
| 656      | ISRLI | EchoStar1 148W TP 01 ConUS beam  |
| 656      | ISRLI | EchoStar3 61.5W TP 27 ConUS beam |
| 657      | ONGME | AMC-16 118.7W TP 17 ConUS beam   |
| 657      | ONGME | EchoStar1 148W TP 29 ConUS beam  |
| 657      | ONGME | EchoStar3 61.5W TP 31 ConUS beam |
| 658      | BTN   | AMC-16 118.7W TP 17 ConUS beam   |
| 658      | BTN   | EchoStar1 148W TP 29 ConUS beam  |
| 658      | BTN   | EchoStar3 61.5W TP 31 ConUS beam |
| 659      | DUBSP | EchoStar1 148W TP 29 ConUS beam  |
| 659      | DUBSP | EchoStar3 61.5W TP 31 ConUS beam |
| 660      | RFI   | EchoStar1 148W TP 01 ConUS beam  |
| 660      | RFI   | EchoStar3 61.5W TP 27 ConUS beam |
| 661      | WOWTV | AMC-16 118.7W TP 17 ConUS beam   |
| 661      | WOWTV | EchoStar9 121W TP 02 ConUS beam  |
| 662      | QTV   | EchoStar1 148W TP 29 ConUS beam  |
| 662      | QTV   | EchoStar3 61.5W TP 31 ConUS beam |
| 663      | MUSIK | EchoStar1 148W TP 29 ConUS beam  |
| 663      | MUSIK | EchoStar3 61.5W TP 31 ConUS beam |
| 664      | ALTER | EchoStar1 148W TP 25 ConUS beam  |
| 664      | ALTER | EchoStar3 61.5W TP 12 ConUS beam |
| 665      | ZIKR  | EchoStar1 148W TP 01 ConUS beam  |
| 665      | ZIKR  | EchoStar3 61.5W TP 27 ConUS beam |
| 667      | K TV  | EchoStar1 148W TP 25 ConUS beam  |
| 667      | K TV  | EchoStar3 61.5W TP 12 ConUS beam |



| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 668      | JSTV  | AMC-16 118.7W TP 17 ConUS beam   |
| 668      | JSTV  | EchoStar9 121W TP 16 ConUS beam  |
| 669      | ARTMU | EchoStar1 148W TP 01 ConUS beam  |
| 669      | ARTMU | EchoStar3 61.5W TP 27 ConUS beam |
| 670      | MBC   | EchoStar2 148W TP 24 ConUS beam  |
| 670      | MBC   | Rainbow 1 61.5W TP 15 ConUS beam |
| 671      | MLODY | EchoStar1 148W TP 01 ConUS beam  |
| 671      | MLODY | EchoStar3 61.5W TP 27 ConUS beam |
| 672      | DANDA | EchoStar1 148W TP 29 ConUS beam  |
| 672      | DANDA | EchoStar3 61.5W TP 31 ConUS beam |
| 673      | ZOOM  | EchoStar1 148W TP 29 ConUS beam  |
| 673      | ZOOM  | EchoStar3 61.5W TP 31 ConUS beam |
| 674      | INDMU | EchoStar1 148W TP 27 ConUS beam  |
| 674      | INDMU | EchoStar3 61.5W TP 16 ConUS beam |
| 675      | TVJPN | EchoStar9 121W TP 05 ConUS beam  |
| 676      | JIC   | AMC-16 118.7W TP 06 ConUS beam   |
| 676      | JIC   | EchoStar9 121W TP 17 ConUS beam  |
| 677      | DRAGN | AMC-16 118.7W TP 18 ConUS beam   |
| 677      | DRAGN | EchoStar9 121W TP 17 ConUS beam  |
| 678      | INDVI | EchoStar1 148W TP 27 ConUS beam  |
| 678      | INDVI | EchoStar3 61.5W TP 16 ConUS beam |
| 679      | PHNIN | AMC-16 118.7W TP 23 ConUS beam   |
| 679      | PHNIN | EchoStar9 121W TP 10 ConUS beam  |
| 680      | PHNIX | AMC-16 118.7W TP 14 ConUS beam   |
| 680      | PHNIX | EchoStar9 121W TP 29 ConUS beam  |
| 681      | CCTV4 | AMC-16 118.7W TP 14 ConUS beam   |
| 681      | CCTV4 | EchoStar9 121W TP 29 ConUS beam  |
| 682      | ETDRA | AMC-16 118.7W TP 01 ConUS beam   |
| 682      | ETDRA | EchoStar9 121W TP 22 ConUS beam  |
| 683      | ETGLB | AMC-16 118.7W TP 01 ConUS beam   |
| 683      | ETGLB | EchoStar9 121W TP 22 ConUS beam  |
| 684      | ETNEW | AMC-16 118.7W TP 01 ConUS beam   |
| 684      | ETNEW | EchoStar9 121W TP 22 ConUS beam  |
| 685      | ETCHI | AMC-16 118.7W TP 14 ConUS beam   |

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 685      | ETCHI | EchoStar9 121W TP 16 ConUS beam |
| 686      | BEJTV | AMC-16 118.7W TP 06 ConUS beam  |
| 686      | BEJTV | EchoStar9 121W TP 17 ConUS beam |
| 687      | YOYO  | AMC-16 118.7W TP 01 ConUS beam  |
| 687      | YOYO  | EchoStar9 121W TP 22 ConUS beam |
| 688      | JET   | AMC-16 118.7W TP 14 ConUS beam  |
| 688      | JET   | EchoStar9 121W TP 29 ConUS beam |
| 689      | TTV   | AMC-16 118.7W TP 23 ConUS beam  |
| 689      | TTV   | EchoStar9 121W TP 10 ConUS beam |
| 690      | CTV   | AMC-16 118.7W TP 23 ConUS beam  |
| 690      | CTV   | EchoStar9 121W TP 10 ConUS beam |
| 691      | CTS   | AMC-16 118.7W TP 23 ConUS beam  |
| 691      | CTS   | EchoStar9 121W TP 10 ConUS beam |
| 692      | SLNK2 | AMC-16 118.7W TP 23 ConUS beam  |
| 692      | SLNK2 | EchoStar9 121W TP 10 ConUS beam |
| 693      | SKLNK | AMC-16 118.7W TP 23 ConUS beam  |
| 693      | SKLNK | EchoStar9 121W TP 10 ConUS beam |
| 694      | CCTV9 | AMC-16 118.7W TP 18 ConUS beam  |
| 694      | CCTV9 | EchoStar9 121W TP 10 ConUS beam |
| 695      | CCEF  | AMC-16 118.7W TP 18 ConUS beam  |
| 695      | CCEF  | EchoStar9 121W TP 10 ConUS beam |
| 696      | CCMOV | AMC-16 118.7W TP 06 ConUS beam  |
| 696      | CCMOV | EchoStar9 121W TP 17 ConUS beam |
| 697      | CCENT | AMC-16 118.7W TP 06 ConUS beam  |
| 697      | CCENT | EchoStar9 121W TP 17 ConUS beam |
| 698      | ATV   | AMC-16 118.7W TP 01 ConUS beam  |
| 698      | ATV   | EchoStar9 121W TP 22 ConUS beam |
| 699      | CCOPR | AMC-16 118.7W TP 06 ConUS beam  |
| 699      | CCOPR | EchoStar9 121W TP 17 ConUS beam |
| 700      | GUAND | AMC-16 118.7W TP 18 ConUS beam  |
| 700      | GUAND | EchoStar9 121W TP 17 ConUS beam |
| 701      | FUJTV | AMC-16 118.7W TP 06 ConUS beam  |
| 701      | FUJTV | EchoStar9 121W TP 17 ConUS beam |
| 704      | KBS   | AMC-16 118.7W TP 17 ConUS beam  |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 704      | KBS   | EchoStar9 121W TP 15 ConUS beam  |
| 705      | ARANG | AMC-16 118.7W TP 17 ConUS beam   |
| 705      | ARANG | EchoStar9 121W TP 05 ConUS beam  |
| 706      | CYRTV | AMC-16 118.7W TP 06 ConUS beam   |
| 706      | CYRTV | EchoStar9 121W TP 17 ConUS beam  |
| 707      | PACVI | AMC-16 118.7W TP 18 ConUS beam   |
| 707      | PACVI | EchoStar9 121W TP 17 ConUS beam  |
| 708      | HUNAN | AMC-16 118.7W TP 06 ConUS beam   |
| 708      | HUNAN | EchoStar9 121W TP 17 ConUS beam  |
| 709      | SETI  | AMC-16 118.7W TP 23 ConUS beam   |
| 709      | SETI  | EchoStar9 121W TP 05 ConUS beam  |
| 710      | ICBLE | AMC-16 118.7W TP 23 ConUS beam   |
| 710      | ICBLE | EchoStar9 121W TP 05 ConUS beam  |
| 711      | ISRLI | EchoStar9 121W TP 05 ConUS beam  |
| 712      | MABHY | AMC-16 118.7W TP 02 ConUS beam   |
| 712      | MABHY | EchoStar9 121W TP 05 ConUS beam  |
| 713      | VIVA  | AMC-16 118.7W TP 01 ConUS beam   |
| 713      | VIVA  | EchoStar9 121W TP 13 ConUS beam  |
| 714      | NBN4  | AMC-16 118.7W TP 01 ConUS beam   |
| 714      | NBN4  | EchoStar9 121W TP 13 ConUS beam  |
| 715      | RPN9  | AMC-16 118.7W TP 01 ConUS beam   |
| 715      | RPN9  | EchoStar9 121W TP 13 ConUS beam  |
| 716      | VIDIT | EchoStar1 148W TP 01 ConUS beam  |
| 716      | VIDIT | EchoStar3 61.5W TP 27 ConUS beam |
| 717      | LEOWD | EchoStar1 148W TP 09 ConUS beam  |
| 717      | LEOWD | EchoStar3 61.5W TP 08 ConUS beam |
| 718      | MEGA  | EchoStar9 121W TP 16 ConUS beam  |
| 719      | ERT   | EchoStar9 121W TP 16 ConUS beam  |
| 720      | ANTEN | EchoStar9 121W TP 16 ConUS beam  |
| 721      | RADGR | EchoStar9 121W TP 16 ConUS beam  |
| 722      | ERA-5 | EchoStar9 121W TP 16 ConUS beam  |
| 723      | ERASP | EchoStar9 121W TP 26 ConUS beam  |
| 725      | DWTV  | AMC-16 118.7W TP 14 ConUS beam   |
| 725      | DWTV  | EchoStar9 121W TP 02 ConUS beam  |

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 726      | PRSBN | AMC-16 118.7W TP 14 ConUS beam  |
| 726      | PRSBN | EchoStar9 121W TP 22 ConUS beam |
| 727      | VIDIT | EchoStar9 121W TP 26 ConUS beam |
| 728      | RAI   | EchoStar9 121W TP 05 ConUS beam |
| 729      | RAIRD | EchoStar9 121W TP 05 ConUS beam |
| 730      | LEOWD | EchoStar9 121W TP 26 ConUS beam |
| 731      | TV5   | AMC-16 118.7W TP 03 ConUS beam  |
| 731      | TV5   | EchoStar9 121W TP 10 ConUS beam |
| 732      | RFI   | AMC-16 118.7W TP 03 ConUS beam  |
| 732      | RFI   | EchoStar9 121W TP 10 ConUS beam |
| 733      | PLSAT | EchoStar9 121W TP 21 ConUS beam |
| 734      | TVN24 | EchoStar9 121W TP 21 ConUS beam |
| 735      | TRACE | AMC-16 118.7W TP 03 ConUS beam  |
| 735      | TRACE | EchoStar9 121W TP 18 ConUS beam |
| 736      | ITVN  | EchoStar9 121W TP 29 ConUS beam |
| 737      | KINO  | EchoStar9 121W TP 21 ConUS beam |
| 738      | RTVI  | EchoStar9 121W TP 21 ConUS beam |
| 739      | RTVI+ | EchoStar9 121W TP 16 ConUS beam |
| 740      | HTBA  | EchoStar9 121W TP 16 ConUS beam |
| 741      | TVCI  | EchoStar9 121W TP 16 ConUS beam |
| 744      | PTV   | EchoStar9 121W TP 06 ConUS beam |
| 745      | GEOTV | EchoStar9 121W TP 06 ConUS beam |
| 746      | ARYDI | EchoStar9 121W TP 06 ConUS beam |
| 747      | ARYOW | EchoStar9 121W TP 06 ConUS beam |
| 751      | TELSA | AMC-16 118.7W TP 02 ConUS beam  |
| 751      | TELSA | EchoStar9 121W TP 05 ConUS beam |
| 753      | TAP1  | AMC-16 118.7W TP 02 ConUS beam  |
| 753      | TAP1  | EchoStar9 121W TP 06 ConUS beam |
| 754      | TAP2  | AMC-16 118.7W TP 02 ConUS beam  |
| 754      | TAP2  | EchoStar9 121W TP 05 ConUS beam |
| 756      | RADIT | EchoStar9 121W TP 26 ConUS beam |
| 757      | RAD60 | EchoStar9 121W TP 26 ConUS beam |
| 758      | ART   | EchoStar9 121W TP 29 ConUS beam |
| 759      | ARTMV | EchoStar9 121W TP 29 ConUS beam |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 760      | LBC   | EchoStar9 121W TP 29 ConUS beam  |
| 761      | ALJAZ | EchoStar9 121W TP 21 ConUS beam  |
| 762      | ESC-1 | EchoStar9 121W TP 22 ConUS beam  |
| 763      | NILE  | EchoStar9 121W TP 22 ConUS beam  |
| 764      | FUTUR | EchoStar9 121W TP 22 ConUS beam  |
| 765      | DUBAI | EchoStar9 121W TP 22 ConUS beam  |
| 766      | MBC   | EchoStar9 121W TP 21 ConUS beam  |
| 767      | ABUDA | EchoStar1 148W TP 11 ConUS beam  |
| 767      | ABUDA | EchoStar3 61.5W TP 18 ConUS beam |
| 768      | ABUDA | EchoStar9 121W TP 15 ConUS beam  |
| 770      | NBN   | EchoStar9 121W TP 26 ConUS beam  |
| 771      | NORST | EchoStar9 121W TP 26 ConUS beam  |
| 772      | ALARA | EchoStar9 121W TP 26 ConUS beam  |
| 773      | IQRAA | EchoStar9 121W TP 26 ConUS beam  |
| 774      | NEWTV | EchoStar9 121W TP 26 ConUS beam  |
| 776      | ALARA | EchoStar1 148W TP 01 ConUS beam  |
| 776      | ALARA | EchoStar3 61.5W TP 27 ConUS beam |
| 778      | NBN   | EchoStar1 148W TP 19 ConUS beam  |
| 778      | NBN   | EchoStar3 61.5W TP 29 ConUS beam |
| 779      | NEWTV | EchoStar1 148W TP 07 ConUS beam  |
| 779      | NEWTV | EchoStar3 61.5W TP 14 ConUS beam |
| 780      | ZIKR  | EchoStar9 121W TP 29 ConUS beam  |
| 781      | ARTMU | EchoStar9 121W TP 29 ConUS beam  |
| 782      | IQRAA | EchoStar1 148W TP 09 ConUS beam  |
| 782      | IQRAA | EchoStar3 61.5W TP 08 ConUS beam |
| 783      | NORST | EchoStar1 148W TP 11 ConUS beam  |
| 783      | NORST | EchoStar3 61.5W TP 18 ConUS beam |
| 784      | EURNS | AMC-16 118.7W TP 02 ConUS beam   |
| 787      | ZEETV | EchoStar9 121W TP 29 ConUS beam  |
| 788      | TVASA | EchoStar9 121W TP 15 ConUS beam  |
| 789      | SET   | EchoStar9 121W TP 15 ConUS beam  |
| 790      | ZCINE | EchoStar9 121W TP 29 ConUS beam  |
| 791      | B4U   | EchoStar9 121W TP 29 ConUS beam  |
| 793      | SETMX | EchoStar9 121W TP 18 ConUS beam  |

| Channel# | Name    | Satellite/Beam                  |
|----------|---------|---------------------------------|
| 794      | AAJTK   | EchoStar9 121W TP 16 ConUS beam |
| 795      | SUNTV   | EchoStar9 121W TP 15 ConUS beam |
| 796      | K TV    | EchoStar9 121W TP 26 ConUS beam |
| 797      | SHARA   | EchoStar9 121W TP 18 ConUS beam |
| 798      | SAMAY   | EchoStar9 121W TP 18 ConUS beam |
| 799      | GEMNI   | AMC-16 118.7W TP 07 ConUS beam  |
| 799      | GEMNI   | EchoStar9 121W TP 15 ConUS beam |
| 800      | SURYA   | AMC-16 118.7W TP 07 ConUS beam  |
| 800      | SURYA   | EchoStar9 121W TP 15 ConUS beam |
| 801      | KAIRA   | AMC-16 118.7W TP 03 ConUS beam  |
| 801      | KAIRA   | EchoStar9 121W TP 06 ConUS beam |
| 802      | TEJA    | AMC-16 118.7W TP 03 ConUS beam  |
| 802      | TEJA    | EchoStar9 121W TP 06 ConUS beam |
| 803      | UDAYA   | AMC-16 118.7W TP 17 ConUS beam  |
| 803      | UDAYA   | EchoStar9 121W TP 26 ConUS beam |
| 804      | NTV     | AMC-16 118.7W TP 03 ConUS beam  |
| 804      | NTV     | EchoStar9 121W TP 10 ConUS beam |
| 805      | RTV(NA) | AMC-16 118.7W TP 03 ConUS beam  |
| 806      | CHNLI   | AMC-16 118.7W TP 03 ConUS beam  |
| 806      | CHNLI   | EchoStar9 121W TP 06 ConUS beam |
| 807      | APUNJ   | EchoStar9 121W TP 25 ConUS beam |
| 808      | B4UMU   | EchoStar9 121W TP 25 ConUS beam |
| 809      | ZGUJ    | EchoStar9 121W TP 25 ConUS beam |
| 810      | ASIFM   | AMC-16 118.7W TP 01 ConUS beam  |
| 810      | ASIFM   | EchoStar9 121W TP 22 ConUS beam |
| 813      | HT      | EchoStar9 121W TP 16 ConUS beam |
| 814      | GLOBO   | EchoStar9 121W TP 15 ConUS beam |
| 815      | RCORD   | EchoStar9 121W TP 15 ConUS beam |
| 816      | RTPI    | EchoStar9 121W TP 06 ConUS beam |
| 817      | SPT     | EchoStar9 121W TP 18 ConUS beam |
| 818      | ATN     | AMC-16 118.7W TP 14 ConUS beam  |
| 818      | ATN     | EchoStar9 121W TP 15 ConUS beam |
| 819      | VMARI   | EchoStar7 119W TP 12 ConUS beam |
| 820      | FIESM   | EchoStar7 119W TP 19 ConUS beam |

| Channel# | Name     | Satellite/Beam                   |
|----------|----------|----------------------------------|
| 821      | LATNS    | EchoStar7 119W TP 19 ConUS beam  |
| 822      | MJITO    | EchoStar7 119W TP 20 ConUS beam  |
| 823      | LFTRA    | EchoStar7 119W TP 20 ConUS beam  |
| 824      | LMUSC    | EchoStar7 119W TP 12 ConUS beam  |
| 825      | AZTCA    | EchoStar8 110W TP 01 ConUS beam  |
| 827      | UNVSN    | EchoStar7 119W TP 02 ConUS beam  |
| 828      | UNVSW    | EchoStar8 110W TP 01 ConUS beam  |
| 830      | FTRAЕ    | EchoStar8 110W TP 01 ConUS beam  |
| 831      | FTRAW    | EchoStar8 110W TP 01 ConUS beam  |
| 833      | GLVSN    | EchoStar7 119W TP 02 ConUS beam  |
| 835      | TMNDO    | EchoStar8 110W TP 05 ConUS beam  |
| 836      | TMDOW    | EchoStar8 110W TP 11 ConUS beam  |
| 837      | TLMPR    | EchoStar8 110W TP 05 ConUS beam  |
| 838      | MUN2     | EchoStar8 110W TP 09 ConUS beam  |
| 839      | CNAL1    | EchoStar8 110W TP 06 ConUS beam  |
| 840      | TVEI     | EchoStar8 110W TP 09 ConUS beam  |
| 841      | TVCOL    | EchoStar8 110W TP 06 ConUS beam  |
| 842      | TVCHL    | EchoStar8 110W TP 06 ConUS beam  |
| 843      | HITN     | EchoStar8 110W TP 03 ConUS beam  |
| 844      | DOMIN    | EchoStar8 110W TP 05 ConUS beam  |
| 845      | DISCE    | EchoStar8 110W TP 09 ConUS beam  |
| 847      | TDIS     | EchoStar7 119W TP 06 ConUS beam  |
| 851      | ALMA(NA) | EchoStar5 129W TP 21 ConUS beam  |
| 851      | ALMA(NA) | EchoStar3 61.5W TP 10 ConUS beam |
| 853      | GOLTV    | EchoStar8 110W TP 09 ConUS beam  |
| 854      | ESPND    | EchoStar8 110W TP 05 ConUS beam  |
| 855      | FSESP    | EchoStar8 110W TP 15 ConUS beam  |
| 857      | SUR      | EchoStar8 110W TP 09 ConUS beam  |
| 859      | CNNES    | EchoStar8 110W TP 15 ConUS beam  |
| 862      | PELIC    | EchoStar8 110W TP 01 ConUS beam  |
| 863      | PCLAS    | EchoStar8 110W TP 01 ConUS beam  |
| 865      | CINEL    | EchoStar8 110W TP 09 ConUS beam  |
| 868      | TLHIT    | EchoStar8 110W TP 09 ConUS beam  |
| 870      | HTV      | EchoStar8 110W TP 15 ConUS beam  |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 872      | MTVES | EchoStar8 110W TP 09 ConUS beam  |
| 873      | BOOM  | EchoStar8 110W TP 15 ConUS beam  |
| 874      | SITV  | EchoStar7 119W TP 21 ConUS beam  |
| 876      | DIY   | EchoStar8 110W TP 05 ConUS beam  |
| 877      | FSC   | EchoStar8 110W TP 11 ConUS beam  |
| 878      | FX    | EchoStar7 119W TP 12 ConUS beam  |
| 879      | BBC   | EchoStar7 119W TP 12 ConUS beam  |
| 880      | BRAVO | EchoStar7 119W TP 02 ConUS beam  |
| 881      | WGN   | EchoStar7 119W TP 18 ConUS beam  |
| 882      | ION   | EchoStar7 119W TP 14 ConUS beam  |
| 884      | CCEF  | EchoStar8 110W TP 22 ConUS beam  |
| 885      | DHLTH | EchoStar7 119W TP 17 ConUS beam  |
| 886      | NTGEO | EchoStar8 110W TP 11 ConUS beam  |
| 887      | ANIML | EchoStar7 119W TP 02 ConUS beam  |
| 888      | DKIDS | EchoStar8 110W TP 15 ConUS beam  |
| 889      | WE    | EchoStar7 119W TP 12 ConUS beam  |
| 890      | AMC   | EchoStar7 119W TP 08 ConUS beam  |
| 891      | SPEED | EchoStar7 119W TP 17 ConUS beam  |
| 892      | CNBCW | EchoStar8 110W TP 05 ConUS beam  |
| 893      | BITV  | EchoStar8 110W TP 02 ConUS beam  |
| 894      | IFC   | EchoStar7 119W TP 06 ConUS beam  |
| 896      | HLMRK | EchoStar8 110W TP 11 ConUS beam  |
| 897      | FOXMO | EchoStar8 110W TP 11 ConUS beam  |
| 898      | TMC-W | EchoStar8 110W TP 21 ConUS beam  |
| 899      | TMCXW | EchoStar8 110W TP 21 ConUS beam  |
| 900      | EURNS | EchoStar1 148W TP 07 ConUS beam  |
| 900      | EURNS | EchoStar3 61.5W TP 14 ConUS beam |
| 901      | EURNS | EchoStar1 148W TP 07 ConUS beam  |
| 901      | EURNS | EchoStar3 61.5W TP 14 ConUS beam |
| 905      | ARMTV | AMC-16 118.7W TP 02 ConUS beam   |
| 905      | ARMTV | EchoStar9 121W TP 05 ConUS beam  |
| 908      | RAD60 | EchoStar1 148W TP 09 ConUS beam  |
| 908      | RAD60 | EchoStar3 61.5W TP 08 ConUS beam |
| 909      | RADIT | EchoStar1 148W TP 01 ConUS beam  |



| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 909      | RADIT | EchoStar3 61.5W TP 27 ConUS beam |
| 910      | RAIRD | EchoStar2 148W TP 24 ConUS beam  |
| 910      | RAIRD | Rainbow 1 61.5W TP 15 ConUS beam |
| 911      | ANTRA | EchoStar1 148W TP 27 ConUS beam  |
| 911      | ANTRA | EchoStar3 61.5W TP 16 ConUS beam |
| 912      | RYTHM | EchoStar1 148W TP 27 ConUS beam  |
| 912      | RYTHM | EchoStar3 61.5W TP 16 ConUS beam |
| 913      | SSPFM | EchoStar1 148W TP 27 ConUS beam  |
| 913      | SSPFM | EchoStar3 61.5W TP 16 ConUS beam |
| 915      | ERA-5 | EchoStar1 148W TP 07 ConUS beam  |
| 915      | ERA-5 | EchoStar3 61.5W TP 14 ConUS beam |
| 916      | ERASP | EchoStar1 148W TP 11 ConUS beam  |
| 916      | ERASP | EchoStar3 61.5W TP 18 ConUS beam |
| 917      | BSN   | EchoStar1 148W TP 07 ConUS beam  |
| 917      | BSN   | EchoStar3 61.5W TP 14 ConUS beam |
| 919      | MUSIC | EchoStar8 110W TP 10 ConUS beam  |
| 920      | ENVOE | EchoStar7 119W TP 08 ConUS beam  |
| 921      | REFL  | EchoStar7 119W TP 21 ConUS beam  |
| 922      | FMONE | EchoStar7 119W TP 08 ConUS beam  |
| 923      | AUD01 | EchoStar7 119W TP 20 ConUS beam  |
| 924      | AUD02 | EchoStar7 119W TP 08 ConUS beam  |
| 925      | AUD03 | EchoStar7 119W TP 04 ConUS beam  |
| 926      | AUD04 | EchoStar7 119W TP 20 ConUS beam  |
| 927      | AUD05 | EchoStar7 119W TP 20 ConUS beam  |
| 928      | AUD06 | EchoStar7 119W TP 20 ConUS beam  |
| 929      | AUD07 | EchoStar7 119W TP 20 ConUS beam  |
| 930      | AUD08 | EchoStar7 119W TP 20 ConUS beam  |
| 931      | AUD09 | EchoStar7 119W TP 20 ConUS beam  |
| 932      | METRO | EchoStar7 119W TP 20 ConUS beam  |
| 933      | AUD10 | EchoStar7 119W TP 20 ConUS beam  |
| 934      | AUD11 | EchoStar7 119W TP 04 ConUS beam  |
| 935      | AUD12 | EchoStar7 119W TP 20 ConUS beam  |
| 936      | AUD13 | EchoStar7 119W TP 20 ConUS beam  |
| 937      | AUD14 | EchoStar7 119W TP 21 ConUS beam  |

| Channel# | Name  | Satellite/Beam                  |
|----------|-------|---------------------------------|
| 938      | AUD15 | EchoStar7 119W TP 04 ConUS beam |
| 939      | AUD16 | EchoStar7 119W TP 20 ConUS beam |
| 940      | LMUSC | EchoStar7 119W TP 12 ConUS beam |
| 941      | VMARI | EchoStar7 119W TP 12 ConUS beam |
| 942      | LFTRA | EchoStar7 119W TP 20 ConUS beam |
| 943      | MJITO | EchoStar7 119W TP 20 ConUS beam |
| 944      | AUD17 | EchoStar7 119W TP 06 ConUS beam |
| 945      | AUD18 | EchoStar7 119W TP 04 ConUS beam |
| 946      | AUD19 | EchoStar7 119W TP 18 ConUS beam |
| 947      | AUD20 | EchoStar7 119W TP 12 ConUS beam |
| 948      | DEST  | EchoStar7 119W TP 12 ConUS beam |
| 949      | MUZK2 | EchoStar7 119W TP 12 ConUS beam |
| 950      | CD 1  | EchoStar7 119W TP 08 ConUS beam |
| 951      | CD 2  | EchoStar7 119W TP 08 ConUS beam |
| 952      | CD 3  | EchoStar7 119W TP 08 ConUS beam |
| 953      | CD 4  | EchoStar7 119W TP 16 ConUS beam |
| 954      | CD 5  | EchoStar7 119W TP 16 ConUS beam |
| 955      | CD 6  | EchoStar7 119W TP 16 ConUS beam |
| 956      | CD 7  | EchoStar7 119W TP 04 ConUS beam |
| 957      | CD 8  | EchoStar7 119W TP 04 ConUS beam |
| 958      | CD 9  | EchoStar7 119W TP 04 ConUS beam |
| 959      | CD 10 | EchoStar7 119W TP 16 ConUS beam |
| 960      | CD 11 | EchoStar7 119W TP 04 ConUS beam |
| 961      | CD 12 | EchoStar7 119W TP 20 ConUS beam |
| 962      | CD 13 | EchoStar7 119W TP 16 ConUS beam |
| 963      | CD 14 | EchoStar7 119W TP 08 ConUS beam |
| 964      | CD 15 | EchoStar7 119W TP 19 ConUS beam |
| 965      | CD 16 | EchoStar7 119W TP 19 ConUS beam |
| 966      | CD 17 | EchoStar7 119W TP 16 ConUS beam |
| 967      | CD 18 | EchoStar7 119W TP 13 ConUS beam |
| 968      | CD 19 | EchoStar7 119W TP 13 ConUS beam |
| 969      | CD 20 | EchoStar7 119W TP 08 ConUS beam |
| 970      | CD 21 | EchoStar7 119W TP 13 ConUS beam |
| 971      | CD 22 | EchoStar7 119W TP 04 ConUS beam |

| Channel# | Name     | Satellite/Beam                        |
|----------|----------|---------------------------------------|
| 972      | CD 23    | EchoStar7 119W TP 04 ConUS beam       |
| 973      | CD 24    | EchoStar7 119W TP 13 ConUS beam       |
| 974      | CD 25    | EchoStar7 119W TP 16 ConUS beam       |
| 975      | CD 26    | EchoStar7 119W TP 13 ConUS beam       |
| 976      | CD 27    | EchoStar7 119W TP 20 ConUS beam       |
| 977      | CD 28    | EchoStar7 119W TP 19 ConUS beam       |
| 978      | CD 29    | EchoStar7 119W TP 19 ConUS beam       |
| 979      | CD 30    | EchoStar7 119W TP 19 ConUS beam       |
| 980      | CD 31    | EchoStar7 119W TP 19 ConUS beam       |
| 981      | CD 32    | EchoStar7 119W TP 20 ConUS beam       |
| 983      | KDMSC    | EchoStar7 119W TP 20 ConUS beam       |
| 988      | DISH6    | EchoStar8 110W TP 10 ConUS beam       |
| 999      | RTLRL    | EchoStar8 110W TP 02 ConUS beam       |
| 4000     | KCNC(NA) | EchoStar7 119W TP 11 ConUS beam       |
| 4001     | KMGH(NA) | EchoStar7 119W TP 11 ConUS beam       |
| 4002     | KUSA(NA) | EchoStar7 119W TP 11 ConUS beam       |
| 4003     | KXAS(NA) | EchoStar7 119W TP 11 ConUS beam       |
| 4004     | WBBM(NA) | EchoStar7 119W TP 11 ConUS beam       |
| 4005     | WFAA(NA) | EchoStar7 119W TP 11 ConUS beam       |
| 5500     | DSCHD    | EchoStar10 110W TP 29 Spotbeam 46(AK) |
| 5501     | TNTHD    | EchoStar10 110W TP 27 Spotbeam 46(AK) |
| 5505     | ESPHD    | EchoStar10 110W TP 29 Spotbeam 46(AK) |
| 5506     | ES2HD    | EchoStar10 110W TP 27 Spotbeam 46(AK) |
| 5507     | NFLHD    | EchoStar10 110W TP 12 Spotbeam 46(AK) |
| 5510     | HDNET    | EchoStar10 110W TP 12 Spotbeam 46(AK) |
| 5511     | HDNMV    | EchoStar10 110W TP 12 Spotbeam 46(AK) |
| 5512     | UNIHD    | EchoStar10 110W TP 12 Spotbeam 46(AK) |
| 5515     | HBOHD    | EchoStar10 110W TP 27 Spotbeam 46(AK) |
| 5516     | SHOHD    | EchoStar10 110W TP 29 Spotbeam 46(AK) |
| 5731     | WXIA     | EchoStar7 119W TP 15 ConUS beam       |
| 5732     | KNTV     | EchoStar7 119W TP 15 ConUS beam       |
| 5733     | WGCL     | EchoStar7 119W TP 15 ConUS beam       |
| 5734     | KPIX     | EchoStar7 119W TP 15 ConUS beam       |
| 5735     | WSB      | EchoStar7 119W TP 15 ConUS beam       |

| Channel# | Name      | Satellite/Beam                  |
|----------|-----------|---------------------------------|
| 5736     | KGO       | EchoStar7 119W TP 15 ConUS beam |
| 5737     | WAGA      | EchoStar7 119W TP 15 ConUS beam |
| 5738     | KTVU      | EchoStar7 119W TP 15 ConUS beam |
| 5740     | IAD11(NA) | EchoStar8 110W TP 08 ConUS beam |
| 5741     | IAD12(NA) | EchoStar8 110W TP 08 ConUS beam |
| 5742     | IAD13(NA) | EchoStar8 110W TP 08 ConUS beam |
| 5743     | IAD14(NA) | EchoStar8 110W TP 08 ConUS beam |
| 5744     | IAD15(NA) | EchoStar8 110W TP 08 ConUS beam |
| 5749     | FVOD(NA)  | EchoStar8 110W TP 16 ConUS beam |
| 5750     | DEMO1(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5751     | VODTS(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5752     | OTST6(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5753     | OTST7(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5754     | OTST1(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5755     | MUX2(NA)  | EchoStar1 148W TP 23 ConUS beam |
| 5756     | ATOOL(NA) | EchoStar8 110W TP 10 ConUS beam |
| 5757     | TVGT(NA)  | EchoStar1 148W TP 23 ConUS beam |
| 5758     | MUX3(NA)  | EchoStar1 148W TP 23 ConUS beam |
| 5759     | TWCTS     | EchoStar7 119W TP 06 ConUS beam |
| 5760     | ETV1(NA)  | EchoStar1 148W TP 23 ConUS beam |
| 5761     | WINK2(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5762     | OTEST(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5763     | OTST3(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5764     | PJAMT(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5765     | OTST2(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5766     | BVOD2(NA) | EchoStar9 121W TP 13 ConUS beam |
| 5767     | IAD10(NA) | EchoStar7 119W TP 11 ConUS beam |
| 5768     | BTVIP(NA) | EchoStar9 121W TP 13 ConUS beam |
| 5769     | DATST(NA) | EchoStar1 148W TP 23 ConUS beam |
| 5770     | IAD1(NA)  | EchoStar8 110W TP 06 ConUS beam |
| 5771     | IAD2      | EchoStar8 110W TP 10 ConUS beam |
| 5772     | IAD3      | EchoStar8 110W TP 10 ConUS beam |
| 5773     | IAD4      | EchoStar8 110W TP 14 ConUS beam |
| 5774     | IAD5      | EchoStar8 110W TP 10 ConUS beam |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 5775     | IAD6      | EchoStar8 110W TP 06 ConUS beam  |
| 5776     | IAD7(NA)  | EchoStar8 110W TP 15 ConUS beam  |
| 5777     | IAD8      | EchoStar8 110W TP 15 ConUS beam  |
| 5778     | IAD9(NA)  | EchoStar8 110W TP 10 ConUS beam  |
| 5779     | INTL1(NA) | EchoStar2 148W TP 04 ConUS beam  |
| 5780     | INTL2(NA) | EchoStar1 148W TP 15 ConUS beam  |
| 5783     | HDSKD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 5784     | HDSKD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 5785     | HDSKD(NA) | EchoStar3 61.5W TP 30 ConUS beam |
| 5786     | HDSKD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 5787     | HDSKD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 5788     | HDSKD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 5789     | HDSKD(NA) | EchoStar5 129W TP 08 ConUS beam  |
| 5800     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5801     | SKDL(NA)  | EchoStar8 110W TP 16 ConUS beam  |
| 5802     | SKDL(NA)  | EchoStar7 119W TP 18 ConUS beam  |
| 5803     | SKDL(NA)  | EchoStar7 119W TP 12 ConUS beam  |
| 5804     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5805     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5806     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5807     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5808     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5809     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5810     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5811     | SKDL(NA)  | EchoStar8 110W TP 24 ConUS beam  |
| 5812     | SKDL(NA)  | EchoStar8 110W TP 16 ConUS beam  |
| 5813     | SKDL(NA)  | EchoStar8 110W TP 16 ConUS beam  |
| 5814     | EPK1(NA)  | EchoStar7 119W TP 18 ConUS beam  |
| 5815     | EPK2(NA)  | EchoStar7 119W TP 10 ConUS beam  |
| 5816     | VOD       | EchoStar7 119W TP 06 ConUS beam  |
| 5817     | VOD       | EchoStar8 110W TP 06 ConUS beam  |
| 5818     | VOD       | EchoStar8 110W TP 08 ConUS beam  |
| 5819     | VOD       | EchoStar8 110W TP 06 ConUS beam  |
| 5820     | VOD       | EchoStar8 110W TP 08 ConUS beam  |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 5821     | VOD       | EchoStar8 110W TP 16 ConUS beam  |
| 5822     | VOD       | EchoStar8 110W TP 06 ConUS beam  |
| 5823     | VOD       | EchoStar8 110W TP 16 ConUS beam  |
| 5824     | VOD       | EchoStar8 110W TP 02 ConUS beam  |
| 5825     | VOD       | EchoStar8 110W TP 06 ConUS beam  |
| 5826     | WABC(NA)  | Rainbow 1 61.5W TP 17 ConUS beam |
| 5827     | WCBS(NA)  | Rainbow 1 61.5W TP 17 ConUS beam |
| 5828     | WNBC(NA)  | Rainbow 1 61.5W TP 17 ConUS beam |
| 5829     | WNYW(NA)  | Rainbow 1 61.5W TP 19 ConUS beam |
| 5830     | SOON      | EchoStar8 110W TP 14 ConUS beam  |
| 5831     | SOON(NA)  | EchoStar8 110W TP 14 ConUS beam  |
| 5832     | SOON2     | EchoStar7 119W TP 16 ConUS beam  |
| 5833     | SOON2(NA) | EchoStar7 119W TP 16 ConUS beam  |
| 5834     | TST25(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5835     | TST26(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5836     | TST(NA)   | EchoStar7 119W TP 11 ConUS beam  |
| 5837     | MP201(NA) | EchoStar2 148W TP 20 ConUS beam  |
| 5838     | MP202(NA) | EchoStar2 148W TP 20 ConUS beam  |
| 5839     | MP203(NA) | EchoStar2 148W TP 20 ConUS beam  |
| 5840     | SPRKY(NA) | EchoStar5 129W TP 17 ConUS beam  |
| 5841     | INFO(NA)  | EchoStar5 129W TP 17 ConUS beam  |
| 5842     | INFO9(NA) | EchoStar5 129W TP 17 ConUS beam  |
| 5843     | MP311(NA) | EchoStar1 148W TP 31 ConUS beam  |
| 5844     | MP312(NA) | EchoStar1 148W TP 31 ConUS beam  |
| 5845     | KABC(NA)  | EchoStar5 129W TP 10 ConUS beam  |
| 5846     | KCBS(NA)  | EchoStar5 129W TP 10 ConUS beam  |
| 5847     | KNBC(NA)  | EchoStar5 129W TP 10 ConUS beam  |
| 5848     | KTTV(NA)  | EchoStar5 129W TP 19 ConUS beam  |
| 5849     | MP051(NA) | EchoStar1 148W TP 05 ConUS beam  |
| 5850     | MP052(NA) | EchoStar1 148W TP 05 ConUS beam  |
| 5851     | MP313(NA) | EchoStar1 148W TP 31 ConUS beam  |
| 5852     | MP314(NA) | EchoStar1 148W TP 31 ConUS beam  |
| 5853     | MP204(NA) | EchoStar2 148W TP 20 ConUS beam  |
| 5854     | HDT5(NA)  | EchoStar2 148W TP 14 ConUS beam  |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 5855     | ETC2      | EchoStar1 148W TP 23 ConUS beam  |
| 5856     | ETC3      | EchoStar8 110W TP 10 ConUS beam  |
| 5857     | MP053(NA) | EchoStar1 148W TP 05 ConUS beam  |
| 5858     | MP054(NA) | EchoStar1 148W TP 05 ConUS beam  |
| 5859     | MP055(NA) | EchoStar1 148W TP 05 ConUS beam  |
| 5860     | RSSM(NA)  | EchoStar2 148W TP 02 ConUS beam  |
| 5861     | CSSM(NA)  | EchoStar2 148W TP 02 ConUS beam  |
| 5862     | SPEC1(NA) | EchoStar1 148W TP 23 ConUS beam  |
| 5863     | SPEC2(NA) | EchoStar1 148W TP 23 ConUS beam  |
| 5864     | SPEC3(NA) | EchoStar1 148W TP 23 ConUS beam  |
| 5865     | SPEC4(NA) | EchoStar2 148W TP 02 ConUS beam  |
| 5866     | TST01(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5867     | TST02(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5868     | TST03(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5869     | TST04(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5870     | TST05(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5871     | TST06(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5872     | TST07(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5873     | TST08(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5874     | TST09(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5875     | TST10(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5876     | TST11(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5877     | TST12(NA) | EchoStar3 61.5W TP 12 ConUS beam |
| 5878     | SOON3     | EchoStar8 110W TP 16 ConUS beam  |
| 5879     | SOON4     | EchoStar7 119W TP 18 ConUS beam  |
| 5880     | SOON5     | EchoStar7 119W TP 10 ConUS beam  |
| 5881     | MP056(NA) | EchoStar1 148W TP 05 ConUS beam  |
| 5882     | MP057(NA) | EchoStar1 148W TP 05 ConUS beam  |
| 5883     | MP315(NA) | EchoStar1 148W TP 31 ConUS beam  |
| 5884     | MP316(NA) | EchoStar1 148W TP 31 ConUS beam  |
| 5885     | MP317(NA) | EchoStar1 148W TP 31 ConUS beam  |
| 5886     | MP205(NA) | EchoStar2 148W TP 20 ConUS beam  |
| 5887     | MP206(NA) | EchoStar2 148W TP 20 ConUS beam  |
| 5888     | MP207(NA) | EchoStar2 148W TP 20 ConUS beam  |

| Channel# | Name      | Satellite/Beam                  |
|----------|-----------|---------------------------------|
| 5889     | MP058(NA) | EchoStar1 148W TP 05 ConUS beam |
| 5890     | MP271(NA) | EchoStar5 129W TP 27 ConUS beam |
| 5896     | MPSDT(NA) | EchoStar8 110W TP 07 ConUS beam |
| 5901     | RYST1(NA) | AMC-15 105W TP 14 ConUS beam    |
| 5902     | RYST2(NA) | AMC-15 105W TP 14 ConUS beam    |
| 5903     | RYST3(NA) | AMC-15 105W TP 14 ConUS beam    |
| 5904     | RYST4(NA) | AMC-15 105W TP 14 ConUS beam    |
| 5905     | RYST5(NA) | AMC-15 105W TP 16 ConUS beam    |
| 5906     | RYST6(NA) | AMC-15 105W TP 16 ConUS beam    |
| 5907     | RYST7(NA) | AMC-15 105W TP 16 ConUS beam    |
| 5908     | RYST8(NA) | AMC-15 105W TP 16 ConUS beam    |
| 5991     | MPT01(NA) | EchoStar1 148W TP 17 ConUS beam |
| 6001     | SIRI      | EchoStar7 119W TP 18 ConUS beam |
| 6002     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6003     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6004     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6005     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6006     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6007     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6008     | SIRI      | EchoStar7 119W TP 18 ConUS beam |
| 6009     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6010     | SIRI      | EchoStar7 119W TP 12 ConUS beam |
| 6011     | SIRI      | EchoStar7 119W TP 12 ConUS beam |
| 6012     | SIRI      | EchoStar7 119W TP 21 ConUS beam |
| 6013     | SIRI      | EchoStar7 119W TP 04 ConUS beam |
| 6014     | SIRI      | EchoStar7 119W TP 18 ConUS beam |
| 6015     | SIRI      | EchoStar7 119W TP 12 ConUS beam |
| 6016     | SIRI      | EchoStar7 119W TP 13 ConUS beam |
| 6017     | SIRI      | EchoStar7 119W TP 13 ConUS beam |
| 6018     | SIRI      | EchoStar7 119W TP 13 ConUS beam |
| 6019     | SIRI      | EchoStar7 119W TP 13 ConUS beam |
| 6020     | SIRI      | EchoStar7 119W TP 13 ConUS beam |
| 6021     | SIRI      | EchoStar7 119W TP 18 ConUS beam |
| 6022     | SIRI      | EchoStar7 119W TP 21 ConUS beam |



| Channel# | Name | Satellite/Beam                  |
|----------|------|---------------------------------|
| 6023     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6024     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6025     | SIRI | EchoStar7 119W TP 04 ConUS beam |
| 6026     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6027     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6028     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6029     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6030     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6031     | SIRI | EchoStar7 119W TP 12 ConUS beam |
| 6032     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6033     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6034     | SIRI | EchoStar7 119W TP 12 ConUS beam |
| 6035     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6036     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6037     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6040     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6043     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6045     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6050     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6051     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6053     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6060     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6061     | SIRI | EchoStar7 119W TP 13 ConUS beam |
| 6062     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6063     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6065     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6066     | SIRI | EchoStar7 119W TP 12 ConUS beam |
| 6068     | SIRI | EchoStar7 119W TP 21 ConUS beam |
| 6070     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6071     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6072     | SIRI | EchoStar7 119W TP 17 ConUS beam |
| 6073     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6074     | SIRI | EchoStar7 119W TP 18 ConUS beam |
| 6075     | SIRI | EchoStar7 119W TP 21 ConUS beam |

| Channel# | Name     | Satellite/Beam                                 |
|----------|----------|--|
| 6077     | SIRI     | EchoStar7 119W TP 18 ConUS beam                |
| 6080     | SIRI     | EchoStar7 119W TP 18 ConUS beam                |
| 6085     | SIRI     | EchoStar7 119W TP 21 ConUS beam                |
| 6086     | SIRI     | EchoStar7 119W TP 18 ConUS beam                |
| 6090     | SIRI     | EchoStar7 119W TP 21 ConUS beam                |
| 6092     | SIRI     | EchoStar7 119W TP 21 ConUS beam                |
| 6097     | SIRI     | EchoStar7 119W TP 13 ConUS beam                |
| 6116     | SIRI     | EchoStar7 119W TP 12 ConUS beam                |
| 6250     | KTVT     | EchoStar10 110W TP 20 Spotbeam 21              |
| 6293     | WHTM     | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 6294     | WHP      | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 6295     | WGAL     | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 6296     | WPMT     | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 6297     | WLYH     | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 6298     | WITF     | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 6299     | WGCB     | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 6300     | WABC     | Rainbow 1 61.5W TP 17 ConUS beam               |
| 6301     | WCBS     | Rainbow 1 61.5W TP 17 ConUS beam               |
| 6302     | WNBC     | Rainbow 1 61.5W TP 17 ConUS beam               |
| 6303     | WNYW     | Rainbow 1 61.5W TP 19 ConUS beam               |
| 6306     | KABC     | EchoStar5 129W TP 10 ConUS beam                |
| 6307     | KCBS     | EchoStar5 129W TP 10 ConUS beam                |
| 6308     | KNBC     | EchoStar5 129W TP 10 ConUS beam                |
| 6309     | KTTV     | EchoStar5 129W TP 19 ConUS beam                |
| 6312     | WLS      | EchoStar5 129W TP 12 ConUS beam                |
| 6313     | WBBM     | EchoStar5 129W TP 12 ConUS beam                |
| 6314     | WMAQ     | EchoStar5 129W TP 12 ConUS beam                |
| 6315     | WFLD     | EchoStar5 129W TP 12 ConUS beam                |
| 6318     | WCVB     | Rainbow 1 61.5W TP 21 ConUS beam               |
| 6319     | WBZ      | Rainbow 1 61.5W TP 21 ConUS beam               |
| 6320     | WHDH     | Rainbow 1 61.5W TP 21 ConUS beam               |
| 6321     | WFXT     | Rainbow 1 61.5W TP 21 ConUS beam               |
| 6324     | KOAT     | EchoStar5 129W TP 07 ConUS beam                |
| 6325     | KRQE(NA) | EchoStar5 129W TP 07 ConUS beam                |

| Channel# | Name     | Satellite/Beam                   |
|----------|----------|----------------------------------|
| 6326     | KOB      | EchoStar5 129W TP 07 ConUS beam  |
| 6327     | KASA     | EchoStar5 129W TP 07 ConUS beam  |
| 6330     | KMGH     | EchoStar5 129W TP 02 ConUS beam  |
| 6331     | KCNC     | EchoStar5 129W TP 02 ConUS beam  |
| 6332     | KUSA     | EchoStar5 129W TP 02 ConUS beam  |
| 6333     | KDVR     | EchoStar5 129W TP 02 ConUS beam  |
| 6340     | WKRN     | EchoStar5 129W TP 13 ConUS beam  |
| 6341     | WTVF     | EchoStar5 129W TP 13 ConUS beam  |
| 6342     | WSMV     | EchoStar5 129W TP 13 ConUS beam  |
| 6343     | WZTV     | EchoStar5 129W TP 13 ConUS beam  |
| 6347     | KSTP     | EchoStar5 129W TP 09 ConUS beam  |
| 6348     | WCCO     | EchoStar5 129W TP 09 ConUS beam  |
| 6349     | KARE     | EchoStar5 129W TP 09 ConUS beam  |
| 6350     | KMSP     | EchoStar5 129W TP 09 ConUS beam  |
| 6353     | WPVI     | Rainbow 1 61.5W TP 11 ConUS beam |
| 6354     | KYW      | Rainbow 1 61.5W TP 11 ConUS beam |
| 6355     | WCAU     | Rainbow 1 61.5W TP 11 ConUS beam |
| 6356     | WTXF     | Rainbow 1 61.5W TP 11 ConUS beam |
| 6359     | WJLA     | Rainbow 1 61.5W TP 05 ConUS beam |
| 6360     | WUSA     | Rainbow 1 61.5W TP 05 ConUS beam |
| 6361     | WRC      | Rainbow 1 61.5W TP 05 ConUS beam |
| 6362     | WTTG     | Rainbow 1 61.5W TP 05 ConUS beam |
| 6365     | WSB      | EchoStar5 129W TP 04 ConUS beam  |
| 6366     | WGCL     | EchoStar5 129W TP 04 ConUS beam  |
| 6367     | WXIA     | EchoStar5 129W TP 04 ConUS beam  |
| 6368     | WAGA     | EchoStar5 129W TP 04 ConUS beam  |
| 6371     | KTVX(NA) | EchoStar5 129W TP 18 ConUS beam  |
| 6372     | KUTV     | EchoStar5 129W TP 18 ConUS beam  |
| 6373     | KSL      | EchoStar5 129W TP 18 ConUS beam  |
| 6374     | KSTU     | EchoStar5 129W TP 18 ConUS beam  |
| 6377     | KMBC     | EchoStar5 129W TP 01 ConUS beam  |
| 6378     | KCTV     | EchoStar5 129W TP 01 ConUS beam  |
| 6379     | KSHB     | EchoStar5 129W TP 01 ConUS beam  |
| 6380     | WDAF     | EchoStar5 129W TP 01 ConUS beam  |

| Channel# | Name     | Satellite/Beam                           |
|----------|----------|--|
| 6383     | WFAA     | EchoStar10 110W TP 31 Spotbeam 21        |
| 6384     | KTVT     | EchoStar10 110W TP 31 Spotbeam 21        |
| 6385     | KXAS     | EchoStar10 110W TP 31 Spotbeam 21        |
| 6386     | KDFW     | EchoStar10 110W TP 31 Spotbeam 21        |
| 6389     | KTRK     | EchoStar10 110W TP 04 Spotbeam 16(SE TX) |
| 6390     | KHOU     | EchoStar10 110W TP 04 Spotbeam 16(SE TX) |
| 6391     | KPRC     | EchoStar10 110W TP 04 Spotbeam 16(SE TX) |
| 6392     | KRIV     | EchoStar10 110W TP 04 Spotbeam 16(SE TX) |
| 6395     | KXTV     | EchoStar10 110W TP 18 Spotbeam 43(CA)    |
| 6396     | KOVR     | EchoStar10 110W TP 18 Spotbeam 43(CA)    |
| 6397     | KCRA     | EchoStar10 110W TP 18 Spotbeam 43(CA)    |
| 6399     | KQCA     | EchoStar10 110W TP 18 Spotbeam 43(CA)    |
| 6401     | WPLG     | EchoStar10 110W TP 12 Spotbeam 01(FL)    |
| 6402     | WFOR     | EchoStar10 110W TP 12 Spotbeam 01(FL)    |
| 6403     | WTVJ     | EchoStar10 110W TP 12 Spotbeam 01(FL)    |
| 6404     | WSVN     | EchoStar10 110W TP 12 Spotbeam 01(FL)    |
| 6407     | KGTV     | EchoStar10 110W TP 29 Spotbeam 39        |
| 6408     | KFMB     | EchoStar10 110W TP 29 Spotbeam 39        |
| 6409     | KNSD     | EchoStar10 110W TP 29 Spotbeam 39        |
| 6410     | XETV     | EchoStar10 110W TP 29 Spotbeam 39        |
| 6414     | KOMO     | EchoStar10 110W TP 04 Spotbeam 45(WA)    |
| 6415     | KIRO     | EchoStar10 110W TP 04 Spotbeam 45(WA)    |
| 6416     | KING     | EchoStar10 110W TP 04 Spotbeam 45(WA)    |
| 6420     | KATU     | EchoStar10 110W TP 29 Spotbeam 44        |
| 6421     | KOIN     | EchoStar10 110W TP 29 Spotbeam 44        |
| 6422     | KGW      | EchoStar10 110W TP 29 Spotbeam 44        |
| 6423     | KPTV     | EchoStar10 110W TP 29 Spotbeam 44        |
| 6426     | KSAT     | EchoStar10 110W TP 25 Spotbeam 22(TX)    |
| 6427     | KENS     | EchoStar10 110W TP 25 Spotbeam 22(TX)    |
| 6428     | WOAI(NA) | EchoStar10 110W TP 25 Spotbeam 22(TX)    |
| 6429     | KABB     | EchoStar10 110W TP 25 Spotbeam 22(TX)    |
| 6432     | KXLY     | EchoStar10 110W TP 20 Spotbeam 40(WA)    |
| 6433     | KREM     | EchoStar10 110W TP 20 Spotbeam 40(WA)    |
| 6434     | KHQ      | EchoStar10 110W TP 20 Spotbeam 40(WA)    |

| Channel# | Name     | Satellite/Beam                             |
|----------|----------|--|
| 6435     | KAYU     | EchoStar10 110W TP 20 Spotbeam 40(WA)      |
| 6438     | KGO      | EchoStar7 119W TP 07 North California beam |
| 6439     | KPIX     | EchoStar7 119W TP 07 North California beam |
| 6440     | KNTV     | EchoStar7 119W TP 07 North California beam |
| 6441     | KTVU     | EchoStar7 119W TP 07 North California beam |
| 6446     | KNXV     | EchoStar10 110W TP 18 Spotbeam 35          |
| 6447     | KPHO     | EchoStar10 110W TP 18 Spotbeam 35          |
| 6448     | KPNX     | EchoStar10 110W TP 18 Spotbeam 35          |
| 6449     | KSAZ     | EchoStar10 110W TP 18 Spotbeam 35          |
| 6450     | KTVK(NA) | EchoStar10 110W TP 20 Spotbeam ??          |
| 6453     | KDNL     | AMC-16 118.7W TP 20 ConUS beam             |
| 6454     | KMOV     | AMC-16 118.7W TP 20 ConUS beam             |
| 6455     | KSDK     | AMC-16 118.7W TP 24 ConUS beam             |
| 6456     | KTVI     | AMC-16 118.7W TP 24 ConUS beam             |
| 6459     | WXYZ     | AMC-16 118.7W TP 04 ConUS beam             |
| 6460     | WWJ      | AMC-16 118.7W TP 04 ConUS beam             |
| 6461     | WDIV     | AMC-16 118.7W TP 05 ConUS beam             |
| 6462     | WJBK     | AMC-16 118.7W TP 05 ConUS beam             |
| 6465     | WTVD     | AMC-16 118.7W TP 19 ConUS beam             |
| 6466     | WRAL(NA) | AMC-16 118.7W TP 19 ConUS beam             |
| 6467     | WNCN     | AMC-16 118.7W TP 22 ConUS beam             |
| 6468     | WRAZ(NA) | AMC-16 118.7W TP 22 ConUS beam             |
| 6477     | WTAE     | AMC-16 118.7W TP 15 ConUS beam             |
| 6478     | KDKA     | AMC-16 118.7W TP 15 ConUS beam             |
| 6479     | WPXI     | AMC-16 118.7W TP 16 ConUS beam             |
| 6480     | WPGH     | AMC-16 118.7W TP 16 ConUS beam             |
| 6483     | WSOC     | AMC-16 118.7W TP 08 ConUS beam             |
| 6484     | WBTW     | AMC-16 118.7W TP 08 ConUS beam             |
| 6485     | WCNC     | AMC-16 118.7W TP 21 ConUS beam             |
| 6486     | WCCB     | AMC-16 118.7W TP 21 ConUS beam             |
| 7000     | D105     | AMC-15 105W TP 07 ConUS beam               |
| 7015     | KTBS     | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)   |
| 7016     | KSLA     | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)   |
| 7017     | KTAL     | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)   |

| Channel# | Name  | Satellite/Beam                           |
|----------|-------|--|
| 7018     | KMSS  | EchoStar10 110W TP 27 Spotbeam 15(LA,AR) |
| 7019     | KSHV  | EchoStar10 110W TP 27 Spotbeam 15(LA,AR) |
| 7021     | KLTS  | EchoStar10 110W TP 27 Spotbeam 15(LA,AR) |
| 7030     | KIMO  | EchoStar7 119W TP 09 Alaska beam         |
| 7031     | KTVA  | EchoStar7 119W TP 09 Alaska beam         |
| 7032     | KTUU  | EchoStar7 119W TP 09 Alaska beam         |
| 7033     | KTBY  | EchoStar7 119W TP 09 Alaska beam         |
| 7035     | KYES  | EchoStar7 119W TP 09 Alaska beam         |
| 7036     | KAKM  | EchoStar7 119W TP 09 Alaska beam         |
| 7038     | KDMD  | EchoStar7 119W TP 09 Alaska beam         |
| 7040     | ALSKA | EchoStar7 119W TP 09 Alaska beam         |
| 7041     | WJET  | EchoStar9 121W TP 30 ConUS beam          |
| 7041     | WJET  | EchoStar5 129W TP 17 ConUS beam          |
| 7042     | WSEE  | EchoStar9 121W TP 30 ConUS beam          |
| 7042     | WSEE  | EchoStar5 129W TP 17 ConUS beam          |
| 7043     | WICU  | EchoStar9 121W TP 30 ConUS beam          |
| 7043     | WICU  | EchoStar5 129W TP 17 ConUS beam          |
| 7044     | WFXP  | EchoStar9 121W TP 30 ConUS beam          |
| 7044     | WFXP  | EchoStar5 129W TP 17 ConUS beam          |
| 7047     | WQLN  | EchoStar9 121W TP 30 ConUS beam          |
| 7047     | WQLN  | EchoStar5 129W TP 17 ConUS beam          |
| 7050     | KAKE  | EchoStar10 110W TP 27 Spotbeam 29        |
| 7051     | KWCH  | EchoStar10 110W TP 27 Spotbeam 29        |
| 7052     | KSNW  | EchoStar10 110W TP 27 Spotbeam 29        |
| 7053     | KSAS  | EchoStar10 110W TP 27 Spotbeam 29        |
| 7054     | KSCW  | EchoStar10 110W TP 27 Spotbeam 29        |
| 7055     | KMTW  | EchoStar10 110W TP 27 Spotbeam 29        |
| 7056     | KPTS  | EchoStar10 110W TP 27 Spotbeam 29        |
| 7057     | KOOD  | EchoStar10 110W TP 29 Spotbeam 29        |
| 7070     | WISN  | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |
| 7071     | WDJT  | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |
| 7072     | WTMJ  | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |
| 7073     | WITI  | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |
| 7074     | WVTV  | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |

| Channel# | Name | Satellite/Beam                                 |
|----------|------|--|
| 7075     | WCGV | EchoStar10 110W TP 04 Spotbeam 18(WI,MI)       |
| 7076     | WMVS | EchoStar10 110W TP 04 Spotbeam 18(WI,MI)       |
| 7077     | WVCY | EchoStar10 110W TP 04 Spotbeam 18(WI,MI)       |
| 7080     | WMVT | EchoStar7 119W TP 05 Midwest beam              |
| 7081     | WMLW | EchoStar7 119W TP 05 Midwest beam              |
| 7090     | WBND | EchoStar7 119W TP 07 Midwest beam              |
| 7091     | WSBT | EchoStar7 119W TP 07 Midwest beam              |
| 7092     | WNDU | EchoStar7 119W TP 07 Midwest beam              |
| 7093     | WSJV | EchoStar7 119W TP 07 Midwest beam              |
| 7094     | WMWB | EchoStar7 119W TP 07 Midwest beam              |
| 7095     | ESBT | EchoStar7 119W TP 07 Midwest beam              |
| 7096     | WNIT | EchoStar7 119W TP 07 Midwest beam              |
| 7097     | WHME | EchoStar7 119W TP 07 Midwest beam              |
| 7105     | WTEN | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7106     | WRGB | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7107     | WNYT | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7108     | WXXA | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7109     | WCWN | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7111     | WMHT | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7112     | WNYA | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 7120     | KTMF | EchoStar10 110W TP 31 Spotbeam 37              |
| 7121     | KPAX | EchoStar10 110W TP 31 Spotbeam 37              |
| 7122     | KECI | EchoStar10 110W TP 31 Spotbeam 37              |
| 7123     | KMMF | EchoStar10 110W TP 31 Spotbeam 37              |
| 7126     | KUFM | EchoStar10 110W TP 31 Spotbeam 37              |
| 7135     | KIVI | EchoStar10 110W TP 25 Spotbeam 41(ID)          |
| 7136     | KBCI | EchoStar10 110W TP 25 Spotbeam 41(ID)          |
| 7137     | KTVB | EchoStar10 110W TP 25 Spotbeam 41(ID)          |
| 7138     | KTRV | EchoStar10 110W TP 25 Spotbeam 41(ID)          |
| 7140     | KNIN | EchoStar10 110W TP 25 Spotbeam 41(ID)          |
| 7141     | KAID | EchoStar10 110W TP 25 Spotbeam 41(ID)          |
| 7142     | KKJB | EchoStar10 110W TP 25 Spotbeam 41(ID)          |
| 7150     | WGTU | EchoStar10 110W TP 04 Spotbeam 18(WI,MI)       |
| 7151     | WWTV | EchoStar10 110W TP 04 Spotbeam 18(WI,MI)       |

| Channel# | Name | Satellite/Beam                           |
|----------|------|--|
| 7152     | WPBN | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |
| 7153     | WFQX | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |
| 7156     | WCMV | EchoStar10 110W TP 04 Spotbeam 18(WI,MI) |
| 7165     | WPTY | EchoStar10 110W TP 20 Spotbeam 14(KY,IN) |
| 7166     | WREG | EchoStar10 110W TP 20 Spotbeam 14(KY,IN) |
| 7167     | WMC  | EchoStar10 110W TP 20 Spotbeam 14(KY,IN) |
| 7168     | WHBQ | EchoStar10 110W TP 20 Spotbeam 14(KY,IN) |
| 7170     | WLMT | EchoStar10 110W TP 20 Spotbeam 14(KY,IN) |
| 7171     | WKNO | EchoStar10 110W TP 20 Spotbeam 14(KY,IN) |
| 7173     | WPXX | EchoStar10 110W TP 20 Spotbeam 14(KY,IN) |
| 7180     | KEZI | EchoStar7 119W TP 01 Northwest beam      |
| 7181     | KVAL | EchoStar7 119W TP 01 Northwest beam      |
| 7182     | KMTR | EchoStar7 119W TP 01 Northwest beam      |
| 7183     | KLSR | EchoStar7 119W TP 01 Northwest beam      |
| 7184     | KEVU | EchoStar7 119W TP 01 Northwest beam      |
| 7185     | KTVC | EchoStar7 119W TP 01 Northwest beam      |
| 7186     | KEPB | EchoStar7 119W TP 01 Northwest beam      |
| 7190     | KCAU | AMC-15 105W TP 23 ConUS beam             |
| 7190     | KCAU | EchoStar5 129W TP 05 ConUS beam          |
| 7191     | KMEG | AMC-15 105W TP 23 ConUS beam             |
| 7191     | KMEG | EchoStar5 129W TP 05 ConUS beam          |
| 7192     | KTIV | AMC-15 105W TP 23 ConUS beam             |
| 7192     | KTIV | EchoStar5 129W TP 05 ConUS beam          |
| 7193     | KPTH | AMC-15 105W TP 23 ConUS beam             |
| 7193     | KPTH | EchoStar5 129W TP 05 ConUS beam          |
| 7195     | KSIN | AMC-15 105W TP 23 ConUS beam             |
| 7195     | KSIN | EchoStar5 129W TP 05 ConUS beam          |
| 7196     | KXNE | AMC-15 105W TP 23 ConUS beam             |
| 7196     | KXNE | EchoStar5 129W TP 05 ConUS beam          |
| 7200     | WSYX | AMC-15 105W TP 18 ConUS beam             |
| 7200     | WSYX | EchoStar5 129W TP 21 ConUS beam          |
| 7201     | WBNS | AMC-15 105W TP 18 ConUS beam             |
| 7201     | WBNS | EchoStar5 129W TP 21 ConUS beam          |
| 7202     | WCMH | AMC-15 105W TP 18 ConUS beam             |



| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 7202     | WCMH | EchoStar5 129W TP 21 ConUS beam             |
| 7203     | WTTE | AMC-15 105W TP 18 ConUS beam                |
| 7203     | WTTE | EchoStar5 129W TP 21 ConUS beam             |
| 7205     | WWHO | AMC-15 105W TP 18 ConUS beam                |
| 7205     | WWHO | EchoStar5 129W TP 21 ConUS beam             |
| 7206     | WOSU | AMC-15 105W TP 18 ConUS beam                |
| 7206     | WOSU | EchoStar5 129W TP 21 ConUS beam             |
| 7207     | WSFJ | AMC-15 105W TP 18 ConUS beam                |
| 7207     | WSFJ | EchoStar5 129W TP 21 ConUS beam             |
| 7210     | WAOW | EchoStar9 121W TP 01 ConUS beam             |
| 7210     | WAOW | EchoStar5 129W TP 16 ConUS beam             |
| 7211     | WSAW | EchoStar9 121W TP 01 ConUS beam             |
| 7211     | WSAW | EchoStar5 129W TP 16 ConUS beam             |
| 7212     | WJFW | EchoStar9 121W TP 01 ConUS beam             |
| 7212     | WJFW | EchoStar5 129W TP 16 ConUS beam             |
| 7213     | WFXS | EchoStar9 121W TP 01 ConUS beam             |
| 7213     | WFXS | EchoStar5 129W TP 16 ConUS beam             |
| 7216     | WHRM | EchoStar9 121W TP 01 ConUS beam             |
| 7216     | WHRM | EchoStar5 129W TP 16 ConUS beam             |
| 7220     | KSPR | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7221     | KOLR | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7222     | KYTV | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7223     | KSFX | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7224     | KWBM | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7225     | KDL  | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7226     | KOZK | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7235     | KEYT | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 7236     | KCOY | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 7237     | KSBY | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 7238     | KKFX | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 7241     | PBS  | EchoStar7 119W TP 08 ConUS beam             |
| 7243     | KPMR | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 7244     | KTAS | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 7250     | WOLO | EchoStar7 119W TP 07 Carolinas beam         |

| Channel# | Name | Satellite/Beam                                    |
|----------|------|---|
| 7251     | WLTX | EchoStar7 119W TP 07 Carolinas beam               |
| 7252     | WIS  | EchoStar7 119W TP 07 Carolinas beam               |
| 7253     | WACH | EchoStar7 119W TP 07 Carolinas beam               |
| 7254     | WKTC | EchoStar7 119W TP 07 Carolinas beam               |
| 7255     | WZRB | EchoStar7 119W TP 07 Carolinas beam               |
| 7256     | WRLK | EchoStar7 119W TP 07 Carolinas beam               |
| 7265     | WXLV | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7266     | WFMY | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7267     | WXII | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7268     | WGHP | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7269     | WCWG | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7270     | WMYV | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7271     | WUNC | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7272     | WLXI | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7280     | WKOW | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 7281     | WISC | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 7282     | WMTV | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 7283     | WMSN | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 7284     | WBUW | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 7286     | WHA  | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 7289     | WVEC | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 7290     | WTKR | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 7291     | WAVY | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 7292     | WVBT | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 7293     | WTVZ | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7294     | WGNT | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7295     | WHRO | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7296     | WSKY | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7297     | WUND | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7300     | KERO | EchoStar10 110W TP 25 Spotbeam 42(CA)             |
| 7301     | KBAK | EchoStar10 110W TP 25 Spotbeam 42(CA)             |
| 7302     | KGET | EchoStar10 110W TP 25 Spotbeam 42(CA)             |
| 7303     | KBFX | EchoStar10 110W TP 25 Spotbeam 42(CA)             |
| 7305     | KUVI | EchoStar10 110W TP 25 Spotbeam 42(CA)             |

| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 7306     | PBS  | EchoStar7 119W TP 08 ConUS beam             |
| 7307     | KZKC | EchoStar10 110W TP 25 Spotbeam 42(CA)       |
| 7315     | WCHS | AMC-15 105W TP 09 ConUS beam                |
| 7315     | WCHS | EchoStar5 129W TP 32 ConUS beam             |
| 7316     | WOWK | AMC-15 105W TP 09 ConUS beam                |
| 7316     | WOWK | EchoStar5 129W TP 32 ConUS beam             |
| 7317     | WSAZ | AMC-15 105W TP 09 ConUS beam                |
| 7317     | WSAZ | EchoStar5 129W TP 32 ConUS beam             |
| 7318     | WVAH | AMC-15 105W TP 09 ConUS beam                |
| 7318     | WVAH | EchoStar5 129W TP 32 ConUS beam             |
| 7319     | WQCW | AMC-15 105W TP 09 ConUS beam                |
| 7319     | WQCW | EchoStar5 129W TP 32 ConUS beam             |
| 7321     | WPBY | AMC-15 105W TP 09 ConUS beam                |
| 7321     | WPBY | EchoStar5 129W TP 32 ConUS beam             |
| 7322     | WOUB | AMC-15 105W TP 09 ConUS beam                |
| 7322     | WOUB | EchoStar5 129W TP 32 ConUS beam             |
| 7324     | WKAS | AMC-15 105W TP 09 ConUS beam                |
| 7324     | WKAS | EchoStar5 129W TP 32 ConUS beam             |
| 7325     | WPBO | AMC-15 105W TP 18 ConUS beam                |
| 7325     | WPBO | EchoStar5 129W TP 21 ConUS beam             |
| 7330     | WTVG | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 7331     | WDEF | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 7332     | WRCB | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 7333     | WDSI | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 7334     | WFLI | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 7335     | WTCI | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 7336     | WCLP | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 7340     | WMTW | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)    |
| 7341     | WGME | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)    |
| 7342     | WCSH | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)    |
| 7343     | WPFO | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)    |
| 7344     | WPXT | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)    |
| 7345     | WPME | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)    |
| 7346     | WCBB | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)    |

| Channel# | Name | Satellite/Beam                                    |
|----------|------|---|
| 7350     | WEAR | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7351     | WKRG | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7352     | WPML | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7353     | WALA | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7354     | WBPG | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7355     | WJTC | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7356     | WEIQ | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7357     | WSRE | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7358     | WHBR | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 7365     | WEHT | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 7366     | WEVV | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 7367     | WFIE | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 7368     | WTVW | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 7369     | WAZE | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 7371     | WNIN | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 7372     | WKOH | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 7380     | WTNH | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY)    |
| 7381     | WFSB | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY)    |
| 7382     | WVIT | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY)    |
| 7383     | WTIC | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY)    |
| 7384     | WTXX | EchoStar7 119W TP 03 Northeast beam               |
| 7385     | WCTX | EchoStar7 119W TP 03 Northeast beam               |
| 7386     | WEDH | EchoStar7 119W TP 03 Northeast beam               |
| 7387     | WUVN | EchoStar7 119W TP 03 Northeast beam               |
| 7388     | WHCT | EchoStar7 119W TP 03 Northeast beam               |
| 7391     | KTKA | EchoStar10 110W TP 31 Spotbeam 24(KS,MN,IA,OH,NE) |
| 7392     | WIBW | EchoStar10 110W TP 31 Spotbeam 24(KS,MN,IA,OH,NE) |
| 7393     | KSNT | EchoStar10 110W TP 31 Spotbeam 24(KS,MN,IA,OH,NE) |
| 7394     | KTMJ | EchoStar10 110W TP 31 Spotbeam 24(KS,MN,IA,OH,NE) |
| 7397     | KTWU | EchoStar10 110W TP 31 Spotbeam 24(KS,MN,IA,OH,NE) |
| 7400     | WAND | EchoStar7 119W TP 05 Midwest beam                 |
| 7401     | WCIA | EchoStar7 119W TP 05 Midwest beam                 |
| 7402     | WICS | EchoStar7 119W TP 05 Midwest beam                 |
| 7403     | WRSP | EchoStar7 119W TP 05 Midwest beam                 |

| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 7404     | WBUI | EchoStar7 119W TP 05 Midwest beam           |
| 7405     | WCFN | EchoStar7 119W TP 05 Midwest beam           |
| 7406     | WEIU | EchoStar7 119W TP 05 Midwest beam           |
| 7407     | WILL | EchoStar7 119W TP 05 Midwest beam           |
| 7408     | WSEC | EchoStar7 119W TP 05 Midwest beam           |
| 7412     | WDAY | EchoStar10 110W TP 23 Spotbeam 32           |
| 7413     | KXJB | EchoStar10 110W TP 23 Spotbeam 32           |
| 7414     | KVLY | EchoStar10 110W TP 23 Spotbeam 32           |
| 7415     | KVRR | EchoStar10 110W TP 23 Spotbeam 32           |
| 7418     | KFME | EchoStar10 110W TP 23 Spotbeam 32           |
| 7420     | WDAZ | EchoStar10 110W TP 23 Spotbeam 32           |
| 7425     | WDTN | AMC-15 105W TP 02 ConUS beam                |
| 7425     | WDTN | EchoStar5 129W TP 05 ConUS beam             |
| 7426     | WHIO | AMC-15 105W TP 02 ConUS beam                |
| 7426     | WHIO | EchoStar5 129W TP 05 ConUS beam             |
| 7427     | WKEF | AMC-15 105W TP 02 ConUS beam                |
| 7427     | WKEF | EchoStar5 129W TP 05 ConUS beam             |
| 7428     | WRGT | AMC-15 105W TP 02 ConUS beam                |
| 7428     | WRGT | EchoStar5 129W TP 05 ConUS beam             |
| 7429     | WBDT | AMC-15 105W TP 02 ConUS beam                |
| 7429     | WBDT | EchoStar5 129W TP 05 ConUS beam             |
| 7431     | WPTD | AMC-15 105W TP 02 ConUS beam                |
| 7431     | WPTD | EchoStar5 129W TP 05 ConUS beam             |
| 7435     | WPTA | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH) |
| 7436     | WANE | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH) |
| 7437     | WISE | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH) |
| 7438     | WFFT | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH) |
| 7441     | WFWA | EchoStar7 119W TP 07 Midwest beam           |
| 7442     | WINM | EchoStar7 119W TP 07 Midwest beam           |
| 7450     | KMIZ | EchoStar10 110W TP 26 Spotbeam 19           |
| 7451     | KRCG | EchoStar10 110W TP 26 Spotbeam 19           |
| 7452     | KOMU | EchoStar10 110W TP 26 Spotbeam 19           |
| 7453     | KQFX | EchoStar10 110W TP 26 Spotbeam 19           |
| 7455     | KZOU | EchoStar10 110W TP 26 Spotbeam 19           |

| Channel# | Name  | Satellite/Beam                              |
|----------|-------|---|
| 7456     | KMOS  | EchoStar10 110W TP 26 Spotbeam 19           |
| 7457     | KNLJ  | EchoStar10 110W TP 26 Spotbeam 19           |
| 7465     | WATM  | EchoStar7 119W TP 01 Northeast beam         |
| 7466     | WTAJ  | EchoStar7 119W TP 01 Northeast beam         |
| 7467     | WJAC  | EchoStar10 110W TP 29 Spotbeam 09           |
| 7468     | WWCP  | EchoStar7 119W TP 01 Northeast beam         |
| 7471     | WPSU  | EchoStar10 110W TP 29 Spotbeam 09           |
| 7472     | WKBS  | EchoStar10 110W TP 29 Spotbeam 09           |
| 7480     | WJCL  | EchoStar7 119W TP 07 Carolinas beam         |
| 7481     | WTOC  | EchoStar7 119W TP 07 Carolinas beam         |
| 7482     | WSAV  | EchoStar7 119W TP 07 Carolinas beam         |
| 7483     | WTGS  | EchoStar7 119W TP 07 Carolinas beam         |
| 7485     | WGSA  | EchoStar7 119W TP 07 Carolinas beam         |
| 7486     | WVAN  | EchoStar7 119W TP 07 Carolinas beam         |
| 7495     | KHBS  | EchoStar10 110W TP 23 Spotbeam 20(OK,MO,AR) |
| 7496     | KFSM  | EchoStar10 110W TP 23 Spotbeam 20(OK,MO,AR) |
| 7497     | KFTA  | EchoStar10 110W TP 23 Spotbeam 20(OK,MO,AR) |
| 7499     | KPBI  | EchoStar10 110W TP 23 Spotbeam 20(OK,MO,AR) |
| 7500     | KNWA  | EchoStar10 110W TP 23 Spotbeam 20(OK,MO,AR) |
| 7501     | KAFT  | EchoStar10 110W TP 23 Spotbeam 20(OK,MO,AR) |
| 7510     | WLAJ  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7511     | WLNS  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7512     | WILX  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7513     | WSYM  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7515     | WHTV  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7516     | WKAR  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7521     | KXII  | EchoStar10 110W TP 20 Spotbeam 21           |
| 7522     | KTEN  | EchoStar10 110W TP 20 Spotbeam 21           |
| 7523     | KXIID | EchoStar10 110W TP 20 Spotbeam 21           |
| 7526     | PBS   | EchoStar7 119W TP 08 ConUS beam             |
| 7530     | WJRT  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7531     | WNEM  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7532     | WEYI  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7533     | WSMH  | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |

| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 7534     | WBSF | EchoStar10 110W TP 20 Spotbeam 13(MI,IN,OH) |
| 7536     | WFUM | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH) |
| 7537     | WAQP | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH) |
| 7539     | WDCQ | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH) |
| 7542     | WTVO | EchoStar10 110W TP 29 Spotbeam 19           |
| 7543     | WIFR | EchoStar10 110W TP 29 Spotbeam 19           |
| 7544     | WREX | EchoStar10 110W TP 29 Spotbeam 19           |
| 7545     | WQRF | EchoStar10 110W TP 29 Spotbeam 19           |
| 7548     | PBS  | EchoStar7 119W TP 08 ConUS beam             |
| 7550     | KLKN | EchoStar10 110W TP 27 Spotbeam 29           |
| 7551     | KOLN | EchoStar10 110W TP 27 Spotbeam 29           |
| 7552     | KHAS | EchoStar10 110W TP 27 Spotbeam 29           |
| 7553     | KTVG | EchoStar10 110W TP 27 Spotbeam 29           |
| 7556     | KUON | EchoStar10 110W TP 27 Spotbeam 29           |
| 7557     | KHGI | EchoStar10 110W TP 27 Spotbeam 29           |
| 7565     | KJCT | EchoStar2 148W TP 04 ConUS beam             |
| 7566     | KREX | EchoStar2 148W TP 04 ConUS beam             |
| 7567     | KKCO | EchoStar2 148W TP 04 ConUS beam             |
| 7568     | KFQX | EchoStar2 148W TP 04 ConUS beam             |
| 7571     | KRMJ | EchoStar2 148W TP 04 ConUS beam             |
| 7574     | WDIO | EchoStar10 110W TP 12 Spotbeam 28(MN)       |
| 7575     | KDLH | EchoStar10 110W TP 12 Spotbeam 28(MN)       |
| 7576     | KBJR | EchoStar10 110W TP 12 Spotbeam 28(MN)       |
| 7577     | KQDS | EchoStar10 110W TP 12 Spotbeam 28(MN)       |
| 7580     | WDSE | EchoStar10 110W TP 12 Spotbeam 28(MN)       |
| 7581     | KRII | EchoStar10 110W TP 12 Spotbeam 28(MN)       |
| 7583     | KVIA | EchoStar10 110W TP 29 Spotbeam 31           |
| 7584     | KDBC | EchoStar10 110W TP 29 Spotbeam 31           |
| 7585     | KTSM | EchoStar10 110W TP 29 Spotbeam 31           |
| 7586     | KFOX | EchoStar10 110W TP 29 Spotbeam 31           |
| 7589     | KCOS | EchoStar10 110W TP 29 Spotbeam 31           |
| 7590     | KSCE | EchoStar10 110W TP 29 Spotbeam 31           |
| 7591     | KINT | EchoStar10 110W TP 29 Spotbeam 31           |
| 7592     | KTDO | EchoStar10 110W TP 29 Spotbeam 31           |

| Channel# | Name  | Satellite/Beam                                 |
|----------|-------|--|
| 7593     | KTFN  | EchoStar10 110W TP 29 Spotbeam 31              |
| 7594     | KRWG  | EchoStar10 110W TP 29 Spotbeam 31              |
| 7600     | WQAD  | EchoStar10 110W TP 27 Spotbeam 19              |
| 7601     | WHBF  | EchoStar10 110W TP 27 Spotbeam 19              |
| 7602     | KWQC  | EchoStar10 110W TP 27 Spotbeam 19              |
| 7603     | KLJB  | EchoStar10 110W TP 27 Spotbeam 19              |
| 7604     | KGCW  | EchoStar10 110W TP 27 Spotbeam 19              |
| 7606     | WQPT  | EchoStar10 110W TP 27 Spotbeam 19              |
| 7607     | KQIN  | EchoStar10 110W TP 27 Spotbeam 19              |
| 7615     | WKPT  | EchoStar10 110W TP 18 Spotbeam 06              |
| 7616     | WJHL  | EchoStar10 110W TP 18 Spotbeam 06              |
| 7617     | WCYB  | EchoStar10 110W TP 18 Spotbeam 06              |
| 7618     | WEMT  | EchoStar10 110W TP 18 Spotbeam 06              |
| 7619     | WCYBD | EchoStar10 110W TP 18 Spotbeam 06              |
| 7620     | WAPK  | EchoStar10 110W TP 18 Spotbeam 06              |
| 7621     | WSBN  | EchoStar10 110W TP 18 Spotbeam 06              |
| 7622     | WLFG  | EchoStar10 110W TP 18 Spotbeam 06              |
| 7625     | WSYR  | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7626     | WTVH  | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7627     | WSTM  | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7628     | WSYT  | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7629     | WNYS  | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7630     | WSTQ  | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7631     | WCNY  | EchoStar10 110W TP 04 Spotbeam 04(MA,VT,PA,NY) |
| 7634     | WHAM  | EchoStar10 110W TP 27 Spotbeam 09              |
| 7635     | WROC  | EchoStar10 110W TP 27 Spotbeam 09              |
| 7636     | WHEC  | EchoStar10 110W TP 27 Spotbeam 09              |
| 7637     | WUHF  | EchoStar10 110W TP 27 Spotbeam 09              |
| 7640     | WXXI  | EchoStar10 110W TP 27 Spotbeam 09              |
| 7644     | KDRV  | EchoStar2 148W TP 18 ConUS beam                |
| 7645     | KTVL  | EchoStar2 148W TP 18 ConUS beam                |
| 7646     | KOBI  | EchoStar2 148W TP 18 ConUS beam                |
| 7647     | KMVU  | EchoStar2 148W TP 18 ConUS beam                |
| 7650     | KSYS  | EchoStar2 148W TP 18 ConUS beam                |



| Channel# | Name  | Satellite/Beam                           |
|----------|-------|--|
| 7651     | KBLN  | EchoStar2 148W TP 18 ConUS beam          |
| 7655     | KRGV  | EchoStar10 110W TP 29 Spotbeam 17        |
| 7656     | KGBT  | EchoStar10 110W TP 29 Spotbeam 17        |
| 7657     | KVEO  | EchoStar10 110W TP 29 Spotbeam 17        |
| 7659     | XHRIO | EchoStar10 110W TP 29 Spotbeam 17        |
| 7661     | KMBH  | EchoStar10 110W TP 29 Spotbeam 17        |
| 7662     | KNVO  | EchoStar10 110W TP 29 Spotbeam 17        |
| 7663     | KTLM  | EchoStar10 110W TP 29 Spotbeam 17        |
| 7667     | WSWG  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA) |
| 7668     | WALB  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA) |
| 7669     | WFXL  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA) |
| 7672     | WABW  | EchoStar7 119W TP 07 Carolinas beam      |
| 7677     | KVII  | EchoStar10 110W TP 26 Spotbeam 26        |
| 7678     | KFDA  | EchoStar10 110W TP 26 Spotbeam 26        |
| 7679     | KAMR  | EchoStar10 110W TP 26 Spotbeam 26        |
| 7680     | KCIT  | EchoStar10 110W TP 26 Spotbeam 26        |
| 7683     | KACV  | EchoStar10 110W TP 26 Spotbeam 26        |
| 7685     | KPTF  | EchoStar10 110W TP 26 Spotbeam 26        |
| 7686     | KTMO  | EchoStar10 110W TP 26 Spotbeam 26        |
| 7688     | WGNO  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7689     | WWL   | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7690     | WDSU  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7691     | WVUE  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7692     | WNOL  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7693     | WUPL  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7694     | WYES  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7695     | WHNO  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7696     | WLAE  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7697     | WPXL  | EchoStar10 110W TP 23 Spotbeam 12(LA)    |
| 7700     | WJBF  | EchoStar10 110W TP 20 Spotbeam 06        |
| 7701     | WRDW  | EchoStar10 110W TP 20 Spotbeam 06        |
| 7702     | WAGT  | EchoStar10 110W TP 26 Spotbeam 06        |
| 7703     | WFXG  | EchoStar10 110W TP 26 Spotbeam 06        |
| 7706     | WCES  | EchoStar7 119W TP 07 Carolinas beam      |

| Channel# | Name      | Satellite/Beam                                    |
|----------|-----------|---|
| 7707     | WEBA      | EchoStar10 110W TP 26 Spotbeam 06                 |
| 7711     | KHQA      | EchoStar10 110W TP 26 Spotbeam 19                 |
| 7712     | WGEM      | EchoStar10 110W TP 26 Spotbeam 19                 |
| 7713     | XGEM      | EchoStar10 110W TP 26 Spotbeam 19                 |
| 7716     | WMEC      | EchoStar10 110W TP 26 Spotbeam 19                 |
| 7717     | WTJR      | EchoStar10 110W TP 26 Spotbeam 19                 |
| 7720     | WXOW      | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)          |
| 7721     | WKBT      | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)          |
| 7722     | WEAU      | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)          |
| 7723     | WLAX      | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)          |
| 7726     | WHLA      | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)          |
| 7731     | WCTI      | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7732     | WNCT      | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7733     | WITN(NA)  | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7734     | WFXI(NA)  | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7735     | WNCTD(NA) | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7736     | GCTI(NA)  | EchoStar10 110W TP 27 Spotbeam 02(NC,SC,VA)       |
| 7737     | WUNM(NA)  | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7740     | KIFI      | EchoStar10 110W TP 29 Spotbeam 37                 |
| 7741     | KIDK      | EchoStar10 110W TP 29 Spotbeam 37                 |
| 7742     | KPVI      | EchoStar10 110W TP 29 Spotbeam 37                 |
| 7743     | KFXP      | EchoStar10 110W TP 29 Spotbeam 37                 |
| 7744     | KPIF      | EchoStar10 110W TP 29 Spotbeam 37                 |
| 7746     | KISU      | EchoStar10 110W TP 29 Spotbeam 37                 |
| 7750     | WHOI      | EchoStar10 110W TP 27 Spotbeam 19                 |
| 7751     | WMBD      | EchoStar10 110W TP 27 Spotbeam 19                 |
| 7752     | WEEK      | EchoStar10 110W TP 27 Spotbeam 19                 |
| 7753     | WYZZ      | EchoStar10 110W TP 27 Spotbeam 19                 |
| 7755     | WAOE      | EchoStar10 110W TP 27 Spotbeam 19                 |
| 7756     | WTVP      | EchoStar10 110W TP 27 Spotbeam 19                 |
| 7760     | WKDH      | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 7761     | WCBI      | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 7762     | WTVA      | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 7763     | WLOV      | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |

| Channel# | Name      | Satellite/Beam                           |
|----------|-----------|--|
| 7766     | WMAE      | EchoStar10 110W TP 26 Spotbeam 11(AL,MS) |
| 7770     | WLNE      | EchoStar9 121W TP 14 ConUS beam          |
| 7770     | WLNE      | EchoStar3 61.5W TP 16 ConUS beam         |
| 7771     | WPRI      | EchoStar9 121W TP 14 ConUS beam          |
| 7771     | WPRI      | EchoStar3 61.5W TP 16 ConUS beam         |
| 7772     | WJAR      | EchoStar9 121W TP 14 ConUS beam          |
| 7772     | WJAR      | EchoStar3 61.5W TP 16 ConUS beam         |
| 7773     | WNAC      | EchoStar9 121W TP 14 ConUS beam          |
| 7773     | WNAC      | EchoStar3 61.5W TP 16 ConUS beam         |
| 7775     | WLWC      | EchoStar9 121W TP 14 ConUS beam          |
| 7775     | WLWC      | EchoStar3 61.5W TP 16 ConUS beam         |
| 7776     | WSBE      | EchoStar9 121W TP 14 ConUS beam          |
| 7776     | WSBE      | EchoStar3 61.5W TP 16 ConUS beam         |
| 7779     | WSJX      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7780     | WVXF      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7781     | WKAQ      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7782     | WAPA      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7783     | WIPR      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7784     | WLII      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7786     | WSJU      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7787     | WSJP      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7788     | WPRU      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7789     | WVGN      | EchoStar10 110W TP 25 Spotbeam 49        |
| 7790     | WCJB      | EchoStar10 110W TP 23 Spotbeam 03(FL,GA) |
| 7791     | WGFL      | EchoStar10 110W TP 23 Spotbeam 03(FL,GA) |
| 7793     | WOGX      | EchoStar10 110W TP 23 Spotbeam 03(FL,GA) |
| 7794     | WCJBD(NA) | EchoStar10 110W TP 23 Spotbeam 03(FL,GA) |
| 7796     | WUFT      | EchoStar10 110W TP 23 Spotbeam 03(FL,GA) |
| 7800     | KDEV      | EchoStar1 148W TP 21 ConUS beam          |
| 7801     | KGWN      | EchoStar1 148W TP 21 ConUS beam          |
| 7802     | KCHY      | EchoStar1 148W TP 21 ConUS beam          |
| 7803     | KLWY      | EchoStar1 148W TP 21 ConUS beam          |
| 7805     | KTNE      | EchoStar1 148W TP 21 ConUS beam          |
| 7806     | KDUH      | EchoStar1 148W TP 21 ConUS beam          |

| Channel# | Name | Satellite/Beam                                    |
|----------|------|---|
| 7809     | KAQY | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)          |
| 7810     | KNOE | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)          |
| 7811     | KTVE | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)          |
| 7812     | KARD | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)          |
| 7813     | KEJB | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)          |
| 7814     | KLTM | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)          |
| 7815     | KMCT | EchoStar10 110W TP 27 Spotbeam 15(LA,AR)          |
| 7820     | WTVG | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 7821     | WTOL | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 7822     | WNWO | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 7823     | WUPW | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 7825     | WGTE | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 7826     | WLMB | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 7830     | WYTV | EchoStar10 110W TP 31 Spotbeam 09                 |
| 7831     | WKBN | EchoStar10 110W TP 31 Spotbeam 09                 |
| 7832     | WFMJ | EchoStar10 110W TP 31 Spotbeam 09                 |
| 7833     | WYFX | EchoStar10 110W TP 31 Spotbeam 09                 |
| 7834     | WNEO | EchoStar10 110W TP 31 Spotbeam 09                 |
| 7838     | WPDE | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA)       |
| 7839     | WBTW | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA)       |
| 7841     | WFXB | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA)       |
| 7842     | WWMB | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA)       |
| 7843     | WJPM | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA)       |
| 7845     | WUNU | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 7850     | WNCF | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7851     | WAKA | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7852     | WSFA | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7853     | WCOV | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7854     | WRJM | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7855     | WAIQ | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7856     | WBIH | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7858     | WBMM | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 7860     | KSWO | EchoStar9 121W TP 09 ConUS beam                   |
| 7860     | KSWO | EchoStar5 129W TP 16 ConUS beam                   |

| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 7861     | KAUZ | EchoStar9 121W TP 09 ConUS beam             |
| 7861     | KAUZ | EchoStar5 129W TP 16 ConUS beam             |
| 7862     | KFDX | EchoStar9 121W TP 09 ConUS beam             |
| 7862     | KFDX | EchoStar5 129W TP 16 ConUS beam             |
| 7863     | KJTL | EchoStar9 121W TP 09 ConUS beam             |
| 7863     | KJTL | EchoStar5 129W TP 16 ConUS beam             |
| 7865     | KKTM | EchoStar9 121W TP 09 ConUS beam             |
| 7865     | KKTM | EchoStar5 129W TP 16 ConUS beam             |
| 7866     | PBS  | EchoStar7 119W TP 08 ConUS beam             |
| 7868     | KODE | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7869     | KOAM | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7870     | KSNF | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7871     | KFJX | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7873     | KOZJ | EchoStar10 110W TP 12 Spotbeam 20(OK,MO,AR) |
| 7877     | WPGA | EchoStar10 110W TP 18 Spotbeam 06           |
| 7878     | WMAZ | EchoStar10 110W TP 18 Spotbeam 06           |
| 7879     | WMGT | EchoStar10 110W TP 18 Spotbeam 06           |
| 7880     | WGXA | EchoStar10 110W TP 18 Spotbeam 06           |
| 7881     | WGNM | EchoStar10 110W TP 18 Spotbeam 06           |
| 7882     | WDCO | EchoStar7 119W TP 07 Carolinas beam         |
| 7886     | WCIV | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA) |
| 7887     | WCSC | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA) |
| 7888     | WCBD | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA) |
| 7889     | WTAT | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA) |
| 7890     | WMMP | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA) |
| 7891     | WITV | EchoStar10 110W TP 04 Spotbeam 02(NC,SC,VA) |
| 7901     | WTHI | EchoStar7 119W TP 07 Midwest beam           |
| 7902     | WTWO | EchoStar7 119W TP 07 Midwest beam           |
| 7903     | WFXW | EchoStar7 119W TP 07 Midwest beam           |
| 7905     | WUSI | EchoStar7 119W TP 05 Midwest beam           |
| 7906     | WVUT | EchoStar7 119W TP 05 Midwest beam           |
| 7911     | WDTV | AMC-15 105W TP 23 ConUS beam                |
| 7911     | WDTV | EchoStar5 129W TP 16 ConUS beam             |
| 7912     | WBOY | AMC-15 105W TP 23 ConUS beam                |

| Channel# | Name | Satellite/Beam                           |
|----------|------|--|
| 7912     | WBOY | EchoStar5 129W TP 16 ConUS beam          |
| 7913     | WVFX | AMC-15 105W TP 23 ConUS beam             |
| 7913     | WVFX | EchoStar5 129W TP 32 ConUS beam          |
| 7915     | WNPB | AMC-15 105W TP 23 ConUS beam             |
| 7915     | WNPB | EchoStar5 129W TP 32 ConUS beam          |
| 7919     | WMBB | EchoStar10 110W TP 04 Spotbeam 07(AL,FL) |
| 7921     | WJHG | EchoStar10 110W TP 04 Spotbeam 07(AL,FL) |
| 7922     | WPGX | EchoStar10 110W TP 04 Spotbeam 07(AL,FL) |
| 7923     | WBIF | EchoStar10 110W TP 04 Spotbeam 07(AL,FL) |
| 7924     | WFSG | EchoStar10 110W TP 04 Spotbeam 07(AL,FL) |
| 7927     | WPCT | EchoStar10 110W TP 04 Spotbeam 07(AL,FL) |
| 7929     | WVAW | AMC-15 105W TP 17 ConUS beam             |
| 7929     | WVAW | EchoStar5 129W TP 32 ConUS beam          |
| 7930     | WCAV | AMC-15 105W TP 17 ConUS beam             |
| 7930     | WCAV | EchoStar5 129W TP 32 ConUS beam          |
| 7931     | WVIR | AMC-15 105W TP 17 ConUS beam             |
| 7931     | WVIR | EchoStar5 129W TP 32 ConUS beam          |
| 7932     | WAHU | AMC-15 105W TP 17 ConUS beam             |
| 7932     | WAHU | EchoStar5 129W TP 17 ConUS beam          |
| 7933     | WHTJ | AMC-15 105W TP 17 ConUS beam             |
| 7933     | WHTJ | EchoStar5 129W TP 17 ConUS beam          |
| 7938     | KAMC | EchoStar2 148W TP 16 ConUS beam          |
| 7939     | KLBK | EchoStar2 148W TP 16 ConUS beam          |
| 7940     | KCBD | EchoStar2 148W TP 16 ConUS beam          |
| 7941     | KJTV | EchoStar2 148W TP 16 ConUS beam          |
| 7942     | KLCW | EchoStar2 148W TP 16 ConUS beam          |
| 7943     | KTXT | EchoStar2 148W TP 16 ConUS beam          |
| 7944     | KPTB | EchoStar2 148W TP 16 ConUS beam          |
| 7945     | KMYL | EchoStar2 148W TP 18 ConUS beam          |
| 7950     | KTWO | EchoStar2 148W TP 04 ConUS beam          |
| 7951     | KGWC | EchoStar2 148W TP 04 ConUS beam          |
| 7952     | KCWY | EchoStar2 148W TP 04 ConUS beam          |
| 7953     | KFNB | EchoStar2 148W TP 04 ConUS beam          |
| 7956     | KCWC | EchoStar2 148W TP 04 ConUS beam          |

| Channel# | Name     | Satellite/Beam                             |
|----------|----------|--|
| 7964     | KBMY     | EchoStar10 110W TP 26 Spotbeam 33          |
| 7965     | KXMC(NA) | EchoStar10 110W TP 26 Spotbeam 33          |
| 7966     | KFYR     | EchoStar10 110W TP 26 Spotbeam 33          |
| 7967     | KNDX(NA) | EchoStar10 110W TP 26 Spotbeam 33          |
| 7970     | KBME     | EchoStar10 110W TP 26 Spotbeam 33          |
| 7978     | KOTA     | EchoStar2 148W TP 12 ConUS beam            |
| 7979     | KCLO     | EchoStar2 148W TP 12 ConUS beam            |
| 7980     | KNBN     | EchoStar2 148W TP 12 ConUS beam            |
| 7981     | KEVN     | EchoStar2 148W TP 12 ConUS beam            |
| 7984     | KBHE     | EchoStar2 148W TP 12 ConUS beam            |
| 7991     | KTXE     | EchoStar2 148W TP 12 ConUS beam            |
| 7992     | KLST     | EchoStar2 148W TP 12 ConUS beam            |
| 7993     | KSAN     | EchoStar2 148W TP 12 ConUS beam            |
| 7994     | KIDY     | EchoStar2 148W TP 12 ConUS beam            |
| 7997     | PBS      | EchoStar7 119W TP 08 ConUS beam            |
| 8000     | KABC     | EchoStar7 119W TP 03 South California beam |
| 8001     | KCBS     | EchoStar7 119W TP 03 South California beam |
| 8002     | KNBC     | EchoStar7 119W TP 03 South California beam |
| 8003     | KTTV     | EchoStar7 119W TP 03 South California beam |
| 8004     | KTLA     | EchoStar7 119W TP 20 ConUS beam            |
| 8005     | KCOP     | EchoStar7 119W TP 03 South California beam |
| 8006     | KCET     | EchoStar7 119W TP 03 South California beam |
| 8007     | KCAL     | EchoStar7 119W TP 03 South California beam |
| 8008     | KMEX     | EchoStar7 119W TP 03 South California beam |
| 8009     | KVEA     | EchoStar7 119W TP 01 South California beam |
| 8010     | KFTR     | EchoStar7 119W TP 01 South California beam |
| 8011     | KAZA     | EchoStar7 119W TP 01 South California beam |
| 8012     | KLCS     | EchoStar7 119W TP 01 South California beam |
| 8013     | KOCE     | EchoStar7 119W TP 01 South California beam |
| 8014     | KVCR     | EchoStar7 119W TP 01 South California beam |
| 8015     | KBEH     | EchoStar7 119W TP 03 South California beam |
| 8016     | KRCA     | EchoStar7 119W TP 01 South California beam |
| 8017     | KSCI     | EchoStar7 119W TP 01 South California beam |
| 8018     | KDOC     | EchoStar7 119W TP 01 South California beam |

| Channel# | Name | Satellite/Beam                                    |
|----------|------|---|
| 8019     | KHIZ | EchoStar7 119W TP 03 South California beam        |
| 8020     | KXLA | EchoStar7 119W TP 01 South California beam        |
| 8021     | KVMD | EchoStar7 119W TP 03 South California beam        |
| 8022     | KJLA | EchoStar7 119W TP 01 South California beam        |
| 8023     | KWHY | EchoStar7 119W TP 01 South California beam        |
| 8030     | WXYZ | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 8031     | WWJ  | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 8032     | WDIV | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 8033     | WJBK | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 8034     | WMYD | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 8035     | WKBD | EchoStar10 110W TP 26 Spotbeam 13(MI,IN,OH)       |
| 8036     | WTVS | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8037     | WADL | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8042     | WBRZ | EchoStar10 110W TP 25 Spotbeam 12(LA)             |
| 8043     | WAFB | EchoStar10 110W TP 25 Spotbeam 12(LA)             |
| 8044     | WVLA | EchoStar10 110W TP 25 Spotbeam 12(LA)             |
| 8045     | WGMB | EchoStar10 110W TP 25 Spotbeam 12(LA)             |
| 8046     | WLPB | EchoStar10 110W TP 25 Spotbeam 12(LA)             |
| 8047     | WBXH | EchoStar10 110W TP 25 Spotbeam 12(LA)             |
| 8050     | WJSU | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 8051     | WIAT | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 8052     | WVTM | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 8053     | WBRC | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 8054     | WTTQ | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 8055     | WABM | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 8056     | WBIQ | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)          |
| 8060     | WUOA | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 8070     | WJLA | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8071     | WUSA | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8072     | WRC  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8073     | WTTG | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8074     | WDCW | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8075     | WDCA | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8076     | WETA | EchoStar7 119W TP 03 Northeast beam               |



| Channel# | Name | Satellite/Beam                                 |
|----------|------|--|
| 8077     | WNVC | EchoStar7 119W TP 03 Northeast beam            |
| 8080     | WFDC | EchoStar7 119W TP 03 Northeast beam            |
| 8081     | WHUT | EchoStar7 119W TP 03 Northeast beam            |
| 8082     | WVPY | EchoStar7 119W TP 03 Northeast beam            |
| 8084     | WNVT | EchoStar7 119W TP 03 Northeast beam            |
| 8085     | WJAL | EchoStar7 119W TP 03 Northeast beam            |
| 8086     | WHAG | EchoStar7 119W TP 03 Northeast beam            |
| 8092     | WVH  | EchoStar10 110W TP 25 Spotbeam 08(ME,VT)       |
| 8093     | WABI | EchoStar10 110W TP 25 Spotbeam 08(ME,VT)       |
| 8094     | WLBZ | EchoStar10 110W TP 25 Spotbeam 08(ME,VT)       |
| 8095     | WFBX | EchoStar10 110W TP 25 Spotbeam 08(ME,VT)       |
| 8096     | WMEB | EchoStar10 110W TP 25 Spotbeam 08(ME,VT)       |
| 8100     | WABC | EchoStar7 119W TP 20 ConUS beam                |
| 8101     | WCBS | EchoStar7 119W TP 20 ConUS beam                |
| 8102     | WNBC | EchoStar7 119W TP 20 ConUS beam                |
| 8103     | WNYW | EchoStar7 119W TP 20 ConUS beam                |
| 8104     | WPIX | EchoStar7 119W TP 20 ConUS beam                |
| 8105     | WWOR | EchoStar7 119W TP 20 ConUS beam                |
| 8106     | WNET | EchoStar7 119W TP 01 Northeast beam            |
| 8107     | WLNY | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8108     | WXTV | EchoStar7 119W TP 01 Northeast beam            |
| 8109     | WNJU | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8110     | WFTY | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8112     | WLIW | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8113     | WNJB | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8114     | WNYE | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8115     | WMBC | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8116     | WRNN | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8117     | WFME | EchoStar7 119W TP 01 Northeast beam            |
| 8118     | WNYN | EchoStar10 110W TP 20 Spotbeam 04(MA,VT,PA,NY) |
| 8130     | WTAE | EchoStar10 110W TP 29 Spotbeam 09              |
| 8131     | KDKA | EchoStar10 110W TP 29 Spotbeam 09              |
| 8132     | WPXI | EchoStar10 110W TP 29 Spotbeam 09              |
| 8133     | WPGH | EchoStar10 110W TP 29 Spotbeam 09              |

| Channel# | Name | Satellite/Beam                                 |
|----------|------|--|
| 8134     | WPMY | EchoStar10 110W TP 29 Spotbeam 09              |
| 8135     | WPCW | EchoStar10 110W TP 29 Spotbeam 09              |
| 8136     | WQED | EchoStar10 110W TP 29 Spotbeam 09              |
| 8137     | WPCB | EchoStar10 110W TP 29 Spotbeam 09              |
| 8142     | WQEX | EchoStar10 110W TP 29 Spotbeam 09              |
| 8150     | WPVI | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8151     | KYW  | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8152     | WCAU | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8153     | WTFX | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8154     | WPHL | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8155     | WPSG | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8156     | WHYY | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8157     | WTVE | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8158     | WUVP | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8159     | WWSI | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8161     | WNJS | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8162     | WYBE | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8164     | WFMZ | EchoStar10 110W TP 12 Spotbeam 04(MA,VT,PA,NY) |
| 8171     | KTXS | EchoStar2 148W TP 16 ConUS beam                |
| 8172     | KTAB | EchoStar2 148W TP 16 ConUS beam                |
| 8173     | KRBC | EchoStar2 148W TP 16 ConUS beam                |
| 8174     | KXVA | EchoStar2 148W TP 16 ConUS beam                |
| 8175     | PBS  | EchoStar7 119W TP 08 ConUS beam                |
| 8178     | KPCB | EchoStar2 148W TP 16 ConUS beam                |
| 8179     | KTES | EchoStar2 148W TP 16 ConUS beam                |
| 8180     | WLOS | EchoStar7 119W TP 05 Carolinas beam            |
| 8181     | WSPA | EchoStar7 119W TP 05 Carolinas beam            |
| 8182     | WYFF | EchoStar7 119W TP 05 Carolinas beam            |
| 8183     | WHNS | EchoStar7 119W TP 05 Carolinas beam            |
| 8184     | WMYA | EchoStar7 119W TP 05 Carolinas beam            |
| 8185     | WYCW | EchoStar7 119W TP 05 Carolinas beam            |
| 8186     | WNTV | EchoStar7 119W TP 05 Carolinas beam            |
| 8190     | WUNC | EchoStar7 119W TP 05 Carolinas beam            |
| 8191     | WNEG | EchoStar7 119W TP 05 Carolinas beam            |

| Channel# | Name | Satellite/Beam                        |
|----------|------|---------------------------------------|
| 8192     | WGGS | EchoStar7 119W TP 05 Carolinas beam   |
| 8200     | KMGH | EchoStar8 110W TP 22 ConUS beam       |
| 8201     | KCNC | EchoStar8 110W TP 22 ConUS beam       |
| 8202     | KUSA | EchoStar8 110W TP 22 ConUS beam       |
| 8203     | KDVR | EchoStar8 110W TP 22 ConUS beam       |
| 8204     | KWGN | EchoStar7 119W TP 20 ConUS beam       |
| 8205     | KTVD | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8206     | KRMA | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8208     | KCEC | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8210     | KWHD | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8211     | KBDI | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8212     | KTFD | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8213     | KDEN | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8214     | KPXC | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8215     | KZCO | EchoStar10 110W TP 12 Spotbeam 30(CO) |
| 8220     | KGO  | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8221     | KPIX | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8222     | KNTV | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8223     | KTVU | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8224     | KBWB | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8225     | KBCW | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8226     | KQED | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8227     | KICU | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8228     | KDTV | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8229     | KSTS | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8230     | KFSF | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8231     | KTNC | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8232     | KMTP | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8233     | KRCB | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8234     | KTEH | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8235     | KCSM | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8236     | KTLN | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8237     | KTSF | EchoStar10 110W TP 31 Spotbeam 43(CA) |
| 8239     | KFTY | EchoStar10 110W TP 31 Spotbeam 43(CA) |

| Channel# | Name  | Satellite/Beam                                    |
|----------|-------|---|
| 8240     | KRON  | EchoStar10 110W TP 31 Spotbeam 43(CA)             |
| 8242     | KAAL  | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8243     | KIMT  | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8244     | KTTC  | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8245     | KXLT  | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8246     | KSMQ  | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8247     | KYIN  | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8250     | KVUE  | EchoStar7 119W TP 07 Texas beam                   |
| 8251     | KEYE  | EchoStar7 119W TP 07 Texas beam                   |
| 8252     | KXAN  | EchoStar7 119W TP 07 Texas beam                   |
| 8253     | KTBC  | EchoStar7 119W TP 07 Texas beam                   |
| 8254     | KNVA  | EchoStar7 119W TP 07 Texas beam                   |
| 8256     | KLRU  | EchoStar7 119W TP 07 Texas beam                   |
| 8258     | KAKW  | EchoStar7 119W TP 07 Texas beam                   |
| 8270     | WFTV  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8271     | WKMG  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8272     | WESH  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8273     | WOFL  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8274     | WKCF  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8275     | WRBW  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8276     | WMFE  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8277     | WRDQ  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8278     | WVEN  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8280     | WOTF  | EchoStar10 110W TP 29 Spotbeam 01(FL)             |
| 8281     | WCEU  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8282     | WBCC  | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8283     | WTGL  | EchoStar10 110W TP 29 Spotbeam 01(FL)             |
| 8284     | WLCB  | EchoStar10 110W TP 29 Spotbeam 01(FL)             |
| 8285     | WACX  | EchoStar10 110W TP 29 Spotbeam 01(FL)             |
| 8286     | W21AU | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 8292     | KATN  | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 8293     | K13XD | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 8294     | KTVF  | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 8295     | KFXF  | EchoStar10 110W TP 26 Spotbeam 46(AK)             |

| Channel# | Name     | Satellite/Beam                              |
|----------|----------|---|
| 8297     | KUAC     | EchoStar10 110W TP 26 Spotbeam 46(AK)       |
| 8298     | KJNP     | EchoStar10 110W TP 26 Spotbeam 46(AK)       |
| 8299     | ALSKA    | EchoStar10 110W TP 26 Spotbeam 46(AK)       |
| 8300     | WSB      | EchoStar10 110W TP 20 Spotbeam 06           |
| 8301     | WGCL     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8302     | WXIA     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8303     | WAGA     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8304     | WATL     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8305     | WUPA     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8306     | WGTV     | EchoStar7 119W TP 07 Carolinas beam         |
| 8307     | WTBS     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8308     | WUVG     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8309     | WATC     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8310     | WPBA     | EchoStar10 110W TP 20 Spotbeam 06           |
| 8320     | KNXV     | EchoStar7 119W TP 05 Arizona beam           |
| 8321     | KPHO     | EchoStar7 119W TP 05 Arizona beam           |
| 8322     | KPNX     | EchoStar7 119W TP 05 Arizona beam           |
| 8323     | KSAZ     | EchoStar7 119W TP 05 Arizona beam           |
| 8324     | KASW     | EchoStar7 119W TP 05 Arizona beam           |
| 8325     | KUTP     | EchoStar7 119W TP 05 Arizona beam           |
| 8326     | KAET     | EchoStar7 119W TP 05 Arizona beam           |
| 8327     | KTVK     | EchoStar7 119W TP 05 Arizona beam           |
| 8328     | KTVW     | EchoStar7 119W TP 05 Arizona beam           |
| 8329     | KTAZ     | EchoStar7 119W TP 05 Arizona beam           |
| 8330     | KFPH     | EchoStar7 119W TP 05 Arizona beam           |
| 8331     | KAZT     | EchoStar7 119W TP 05 Arizona beam           |
| 8338     | KMOH     | EchoStar7 119W TP 07 Arizona beam           |
| 8347     | WVPT(NA) | EchoStar7 119W TP 03 Northeast beam         |
| 8350     | WCPO     | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8351     | WKRC     | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8352     | WLWT     | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8353     | WXIX     | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8354     | WSTR     | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8356     | WCET     | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |

| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 8360     | WCVN | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8361     | WPTO | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8370     | KTRK | EchoStar7 119W TP 05 Texas beam             |
| 8371     | KHOU | EchoStar7 119W TP 05 Texas beam             |
| 8372     | KPRC | EchoStar7 119W TP 05 Texas beam             |
| 8373     | KRIV | EchoStar7 119W TP 05 Texas beam             |
| 8374     | KHCW | EchoStar7 119W TP 07 Texas beam             |
| 8375     | KTXH | EchoStar7 119W TP 07 Texas beam             |
| 8376     | KUHT | EchoStar7 119W TP 07 Texas beam             |
| 8377     | KNWS | EchoStar7 119W TP 07 Texas beam             |
| 8378     | KXLN | EchoStar7 119W TP 07 Texas beam             |
| 8379     | KTMD | EchoStar10 110W TP 12 Spotbeam 16(SE TX)    |
| 8380     | KFTH | EchoStar10 110W TP 12 Spotbeam 16(SE TX)    |
| 8381     | KAZH | EchoStar10 110W TP 12 Spotbeam 16(SE TX)    |
| 8382     | KTBU | EchoStar10 110W TP 12 Spotbeam 16(SE TX)    |
| 8384     | KZJL | EchoStar10 110W TP 12 Spotbeam 16(SE TX)    |
| 8389     | KMID | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8390     | KOSA | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8391     | KWES | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8392     | KPEJ | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8393     | KWWT | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8394     | KPBT | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8395     | KUPB | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8396     | KMLM | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8397     | KTLE | EchoStar10 110W TP 12 Spotbeam 27(W TX)     |
| 8400     | WFAA | EchoStar10 110W TP 20 Spotbeam 21           |
| 8401     | KTVT | EchoStar10 110W TP 20 Spotbeam 21           |
| 8402     | KXAS | EchoStar10 110W TP 20 Spotbeam 21           |
| 8403     | KDFW | EchoStar10 110W TP 20 Spotbeam 21           |
| 8404     | KDAF | EchoStar10 110W TP 29 Spotbeam 21           |
| 8405     | KTXA | EchoStar10 110W TP 29 Spotbeam 21           |
| 8406     | KERA | EchoStar10 110W TP 20 Spotbeam 21           |
| 8407     | KDFI | EchoStar10 110W TP 29 Spotbeam 21           |
| 8408     | KUVN | EchoStar10 110W TP 29 Spotbeam 21           |

| Channel# | Name     | Satellite/Beam                                    |
|----------|----------|---|
| 8409     | KFWD     | EchoStar10 110W TP 29 Spotbeam 21                 |
| 8410     | KSTR     | EchoStar10 110W TP 29 Spotbeam 21                 |
| 8411     | KXTX     | EchoStar10 110W TP 29 Spotbeam 21                 |
| 8412     | KLDT     | EchoStar10 110W TP 29 Spotbeam 21                 |
| 8413     | KMPX     | EchoStar10 110W TP 29 Spotbeam 21                 |
| 8414     | KTAQ(NA) | EchoStar10 110W TP 29 Spotbeam 21                 |
| 8416     | KPXD     | EchoStar10 110W TP 29 Spotbeam 21                 |
| 8430     | KMBC     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8431     | KCTV     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8432     | KSHB     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8433     | WDAF     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8434     | KSMO     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8435     | KCWE     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8436     | KCPT     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8437     | KMCI     | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 8443     | KBMT     | EchoStar10 110W TP 12 Spotbeam 16(SE TX)          |
| 8444     | KFDM     | EchoStar10 110W TP 12 Spotbeam 16(SE TX)          |
| 8445     | KBTV     | EchoStar10 110W TP 12 Spotbeam 16(SE TX)          |
| 8446     | KUIL     | EchoStar10 110W TP 12 Spotbeam 16(SE TX)          |
| 8447     | KITU     | EchoStar10 110W TP 12 Spotbeam 16(SE TX)          |
| 8448     | PBS      | EchoStar7 119W TP 08 ConUS beam                   |
| 8450     | WRTV     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8451     | WISH     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8452     | WTHR     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8453     | WXIN     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8454     | WTTV     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8455     | WNDY     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8456     | WFYI     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8457     | WHMB     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8462     | WTIU     | EchoStar10 110W TP 18 Spotbeam 13(IN,MI,OH)       |
| 8470     | KSAT     | EchoStar10 110W TP 23 Spotbeam 22(TX)             |
| 8471     | KENS     | EchoStar10 110W TP 23 Spotbeam 22(TX)             |
| 8472     | WOAI     | EchoStar10 110W TP 23 Spotbeam 22(TX)             |
| 8473     | KABB     | EchoStar10 110W TP 23 Spotbeam 22(TX)             |

| Channel# | Name | Satellite/Beam                        |
|----------|------|---------------------------------------|
| 8474     | KMYS | EchoStar10 110W TP 23 Spotbeam 22(TX) |
| 8475     | KCWX | EchoStar10 110W TP 23 Spotbeam 22(TX) |
| 8476     | KLRN | EchoStar10 110W TP 23 Spotbeam 22(TX) |
| 8477     | KNIC | EchoStar10 110W TP 23 Spotbeam 22(TX) |
| 8478     | KWEX | EchoStar10 110W TP 23 Spotbeam 22(TX) |
| 8479     | KVDA | EchoStar10 110W TP 23 Spotbeam 22(TX) |
| 8484     | KATC | EchoStar10 110W TP 25 Spotbeam 12(LA) |
| 8485     | KLFY | EchoStar10 110W TP 25 Spotbeam 12(LA) |
| 8487     | KADN | EchoStar10 110W TP 25 Spotbeam 12(LA) |
| 8488     | KLPB | EchoStar10 110W TP 25 Spotbeam 12(LA) |
| 8489     | KLWB | EchoStar10 110W TP 25 Spotbeam 12(LA) |
| 8490     | WLS  | EchoStar8 110W TP 22 ConUS beam       |
| 8491     | WBBM | EchoStar8 110W TP 22 ConUS beam       |
| 8492     | WMAQ | EchoStar8 110W TP 22 ConUS beam       |
| 8493     | WFLD | EchoStar8 110W TP 22 ConUS beam       |
| 8494     | WGN9 | EchoStar10 110W TP 31 Spotbeam 19     |
| 8495     | WPWR | EchoStar10 110W TP 31 Spotbeam 19     |
| 8496     | WTTW | EchoStar10 110W TP 31 Spotbeam 19     |
| 8497     | WCIU | EchoStar10 110W TP 31 Spotbeam 19     |
| 8498     | WGBO | EchoStar10 110W TP 31 Spotbeam 19     |
| 8499     | WSNS | EchoStar10 110W TP 31 Spotbeam 19     |
| 8500     | WXFT | EchoStar10 110W TP 31 Spotbeam 19     |
| 8501     | WYCC | EchoStar10 110W TP 31 Spotbeam 19     |
| 8502     | WYIN | EchoStar10 110W TP 31 Spotbeam 19     |
| 8503     | WJYS | EchoStar10 110W TP 31 Spotbeam 19     |
| 8504     | WOCK | EchoStar10 110W TP 31 Spotbeam 19     |
| 8505     | WWME | EchoStar10 110W TP 31 Spotbeam 19     |
| 8510     | WEWS | EchoStar10 110W TP 31 Spotbeam 09     |
| 8511     | WOIO | EchoStar10 110W TP 31 Spotbeam 09     |
| 8512     | WKYC | EchoStar10 110W TP 31 Spotbeam 09     |
| 8513     | WJW  | EchoStar10 110W TP 31 Spotbeam 09     |
| 8514     | WBNX | EchoStar10 110W TP 31 Spotbeam 09     |
| 8515     | WUAB | EchoStar10 110W TP 31 Spotbeam 09     |
| 8516     | WVIZ | EchoStar10 110W TP 31 Spotbeam 09     |



| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 8520     | WEAO | EchoStar10 110W TP 31 Spotbeam 09           |
| 8521     | WQHS | EchoStar10 110W TP 29 Spotbeam 09           |
| 8530     | KTVX | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8531     | KUTV | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8532     | KSL  | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8533     | KSTU | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8534     | KUCW | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8535     | KPNZ | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8536     | KUED | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8537     | KJZZ | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8539     | KUTF | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8540     | KBYU | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8541     | KUEN | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8543     | KCSG | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8544     | KCBU | EchoStar10 110W TP 26 Spotbeam 34(UT)       |
| 8545     | KUPX | EchoStar10 110W TP 26 Spotbeam 34(UT)       |
| 8546     | KUTH | EchoStar10 110W TP 23 Spotbeam 34(UT)       |
| 8550     | WKRN | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8551     | WTVF | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8552     | WSMV | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8553     | WZTV | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH) |
| 8554     | WNAB | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 8555     | WUXP | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 8556     | WNPT | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 8557     | WHTN | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 8560     | WJFB | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 8561     | WCTE | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 8565     | WDHN | EchoStar10 110W TP 04 Spotbeam 07(AL,FL)    |
| 8566     | WTVY | EchoStar10 110W TP 04 Spotbeam 07(AL,FL)    |
| 8567     | WDFX | EchoStar10 110W TP 04 Spotbeam 07(AL,FL)    |
| 8568     | PBS  | EchoStar7 119W TP 08 ConUS beam             |
| 8570     | KSTP | EchoStar10 110W TP 04 Spotbeam 28(MN)       |
| 8571     | WCCO | EchoStar10 110W TP 04 Spotbeam 28(MN)       |
| 8572     | KARE | EchoStar10 110W TP 04 Spotbeam 28(MN)       |

| Channel# | Name | Satellite/Beam                        |
|----------|------|---------------------------------------|
| 8573     | WFTC | EchoStar10 110W TP 04 Spotbeam 28(MN) |
| 8574     | WUCW | EchoStar10 110W TP 04 Spotbeam 28(MN) |
| 8575     | KMSP | EchoStar10 110W TP 04 Spotbeam 28(MN) |
| 8576     | KTCA | EchoStar10 110W TP 04 Spotbeam 28(MN) |
| 8577     | KSTC | EchoStar10 110W TP 04 Spotbeam 28(MN) |
| 8580     | KTCI | EchoStar10 110W TP 04 Spotbeam 28(MN) |
| 8583     | KAWB | EchoStar10 110W TP 04 Spotbeam 28(MN) |
| 8590     | KDNL | EchoStar10 110W TP 29 Spotbeam 19     |
| 8591     | KMOV | EchoStar10 110W TP 29 Spotbeam 19     |
| 8592     | KSDK | EchoStar10 110W TP 29 Spotbeam 19     |
| 8593     | KTVI | EchoStar10 110W TP 29 Spotbeam 19     |
| 8594     | KPLR | EchoStar10 110W TP 29 Spotbeam 19     |
| 8596     | KETC | EchoStar10 110W TP 29 Spotbeam 19     |
| 8597     | KNLC | EchoStar10 110W TP 29 Spotbeam 19     |
| 8600     | WPXS | EchoStar10 110W TP 29 Spotbeam 19     |
| 8601     | WRBU | EchoStar10 110W TP 29 Spotbeam 19     |
| 8610     | KOMO | EchoStar7 119W TP 03 Northwest beam   |
| 8611     | KIRO | EchoStar7 119W TP 03 Northwest beam   |
| 8612     | KING | EchoStar7 119W TP 03 Northwest beam   |
| 8613     | KCPQ | EchoStar7 119W TP 03 Northwest beam   |
| 8614     | KMYQ | EchoStar7 119W TP 03 Northwest beam   |
| 8615     | KSTW | EchoStar7 119W TP 03 Northwest beam   |
| 8616     | KCTS | EchoStar7 119W TP 03 Northwest beam   |
| 8617     | KONG | EchoStar7 119W TP 03 Northwest beam   |
| 8620     | KBTC | EchoStar7 119W TP 03 Northwest beam   |
| 8621     | KBCB | EchoStar7 119W TP 03 Northwest beam   |
| 8623     | KHCV | EchoStar7 119W TP 03 Northwest beam   |
| 8624     | KUNS | EchoStar7 119W TP 03 Northwest beam   |
| 8630     | KXTV | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8631     | KOVR | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8632     | KCRA | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8633     | KTXL | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8634     | KQCA | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8635     | KMAX | EchoStar10 110W TP 20 Spotbeam 43(CA) |

| Channel# | Name | Satellite/Beam                        |
|----------|------|---------------------------------------|
| 8636     | KVIE | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8638     | KUVS | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8640     | KTFK | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8641     | KTNC | EchoStar10 110W TP 26 Spotbeam 43(CA) |
| 8642     | KSPX | EchoStar10 110W TP 20 Spotbeam 43(CA) |
| 8650     | WSOC | EchoStar10 110W TP 26 Spotbeam 06     |
| 8651     | WBTW | EchoStar10 110W TP 26 Spotbeam 06     |
| 8652     | WCNC | EchoStar10 110W TP 26 Spotbeam 06     |
| 8653     | WCCB | EchoStar10 110W TP 26 Spotbeam 06     |
| 8654     | WMYT | EchoStar10 110W TP 26 Spotbeam 06     |
| 8655     | WJZY | EchoStar10 110W TP 26 Spotbeam 06     |
| 8656     | WTVI | EchoStar10 110W TP 26 Spotbeam 06     |
| 8657     | WAXN | EchoStar10 110W TP 26 Spotbeam 06     |
| 8660     | WHKY | EchoStar10 110W TP 26 Spotbeam 06     |
| 8661     | WNSC | EchoStar10 110W TP 26 Spotbeam 06     |
| 8662     | WUNC | EchoStar7 119W TP 05 Carolinas beam   |
| 8670     | KATU | EchoStar10 110W TP 27 Spotbeam 44     |
| 8671     | KOIN | EchoStar10 110W TP 27 Spotbeam 44     |
| 8672     | KGW  | EchoStar10 110W TP 27 Spotbeam 44     |
| 8673     | KPDX | EchoStar10 110W TP 27 Spotbeam 44     |
| 8674     | KRCW | EchoStar10 110W TP 27 Spotbeam 44     |
| 8675     | KPTV | EchoStar10 110W TP 27 Spotbeam 44     |
| 8676     | KOPB | EchoStar10 110W TP 27 Spotbeam 44     |
| 8680     | KPXG | EchoStar10 110W TP 27 Spotbeam 44     |
| 8690     | WFTS | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8691     | WTSP | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8692     | WFLA | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8693     | WTVT | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8694     | WTTA | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8695     | WTOG | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8696     | WEDU | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8697     | WMOR | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8698     | WVEA | EchoStar10 110W TP 27 Spotbeam 01(FL) |
| 8700     | WFTT | EchoStar10 110W TP 27 Spotbeam 01(FL) |

| Channel# | Name | Satellite/Beam                                    |
|----------|------|---|
| 8701     | WUSF | EchoStar10 110W TP 27 Spotbeam 01(FL)             |
| 8702     | WCLF | EchoStar10 110W TP 27 Spotbeam 01(FL)             |
| 8703     | WXPX | EchoStar10 110W TP 27 Spotbeam 01(FL)             |
| 8710     | WZZM | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8711     | WWMT | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8712     | WOOD | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8713     | WXMI | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8716     | WGVU | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8720     | WTLJ | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8721     | WOTV | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH)       |
| 8730     | WMAR | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8731     | WJZ  | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8732     | WBAL | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8733     | WBFF | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8734     | WNUV | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8735     | WUTB | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8736     | WMPT | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 8750     | WTVB | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 8751     | WRAL | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 8752     | WNCN | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 8753     | WRAZ | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 8754     | WLFL | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 8755     | WRDC | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 8756     | WUNC | EchoStar7 119W TP 05 Carolinas beam               |
| 8757     | WUVC | EchoStar10 110W TP 29 Spotbeam 02(NC,SC,VA)       |
| 8770     | WCVB | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY)    |
| 8771     | WBZ  | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY)    |
| 8772     | WHDH | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY)    |
| 8773     | WFXT | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY)    |
| 8774     | WLVI | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY)    |
| 8775     | WSBK | EchoStar7 119W TP 20 ConUS beam                   |
| 8776     | WGBH | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY)    |
| 8777     | WZMY | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY)    |
| 8778     | WUNI | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY)    |

| Channel# | Name | Satellite/Beam                                 |
|----------|------|--|
| 8779     | WNEU | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY) |
| 8780     | WUTF | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY) |
| 8781     | WENH | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY) |
| 8782     | WGBX | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY) |
| 8784     | WMUR | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY) |
| 8785     | WWDP | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 8790     | KGTV | EchoStar10 110W TP 27 Spotbeam 39              |
| 8791     | KFMB | EchoStar10 110W TP 27 Spotbeam 39              |
| 8792     | KNSD | EchoStar10 110W TP 27 Spotbeam 39              |
| 8793     | XETV | EchoStar10 110W TP 27 Spotbeam 39              |
| 8794     | KSWB | EchoStar7 119W TP 21 ConUS beam                |
| 8796     | KPBS | EchoStar10 110W TP 27 Spotbeam 39              |
| 8797     | KUSI | EchoStar10 110W TP 27 Spotbeam 39              |
| 8798     | KZSD | EchoStar10 110W TP 27 Spotbeam 39              |
| 8801     | KSAW | EchoStar10 110W TP 31 Spotbeam 37              |
| 8802     | KMVT | EchoStar10 110W TP 31 Spotbeam 37              |
| 8803     | KTFT | EchoStar10 110W TP 31 Spotbeam 37              |
| 8804     | KXTF | EchoStar10 110W TP 31 Spotbeam 37              |
| 8807     | KIPT | EchoStar10 110W TP 31 Spotbeam 37              |
| 8810     | KOAT | EchoStar10 110W TP 27 Spotbeam 31              |
| 8811     | KRQE | EchoStar10 110W TP 27 Spotbeam 31              |
| 8812     | KOB  | EchoStar10 110W TP 27 Spotbeam 31              |
| 8813     | KASA | EchoStar10 110W TP 27 Spotbeam 31              |
| 8814     | KWBQ | EchoStar10 110W TP 27 Spotbeam 31              |
| 8815     | KASY | EchoStar10 110W TP 27 Spotbeam 31              |
| 8816     | KNME | EchoStar10 110W TP 27 Spotbeam 31              |
| 8817     | KAZQ | EchoStar10 110W TP 27 Spotbeam 31              |
| 8818     | KLUZ | EchoStar10 110W TP 27 Spotbeam 31              |
| 8819     | KTEL | EchoStar10 110W TP 27 Spotbeam 31              |
| 8822     | KCHF | EchoStar10 110W TP 27 Spotbeam 31              |
| 8823     | KRPV | EchoStar10 110W TP 27 Spotbeam 31              |
| 8824     | KTFQ | EchoStar10 110W TP 27 Spotbeam 31              |
| 8830     | WPLG | EchoStar7 119W TP 03 South Florida beam        |
| 8831     | WFOR | EchoStar7 119W TP 03 South Florida beam        |

| Channel# | Name     | Satellite/Beam                          |
|----------|----------|---|
| 8832     | WTVJ     | EchoStar7 119W TP 03 South Florida beam |
| 8833     | WSVN     | EchoStar7 119W TP 03 South Florida beam |
| 8834     | WSFL     | EchoStar7 119W TP 16 ConUS beam         |
| 8835     | WBFS     | EchoStar7 119W TP 03 South Florida beam |
| 8836     | WPBT     | EchoStar7 119W TP 03 South Florida beam |
| 8837     | WPMF     | EchoStar7 119W TP 01 South Florida beam |
| 8838     | WLTW     | EchoStar7 119W TP 03 South Florida beam |
| 8839     | WSCV     | EchoStar7 119W TP 03 South Florida beam |
| 8840     | WAMI     | EchoStar7 119W TP 03 South Florida beam |
| 8841     | WLRN     | EchoStar7 119W TP 01 South Florida beam |
| 8842     | WSBS     | EchoStar7 119W TP 01 South Florida beam |
| 8843     | WPXM     | EchoStar7 119W TP 03 South Florida beam |
| 8844     | WJAN     | EchoStar7 119W TP 03 South Florida beam |
| 8845     | WGEN     | EchoStar7 119W TP 03 South Florida beam |
| 8850     | KFBB     | EchoStar10 110W TP 04 Spotbeam 36       |
| 8851     | KRTV     | EchoStar10 110W TP 04 Spotbeam 36       |
| 8852     | KBGF     | EchoStar10 110W TP 04 Spotbeam 36       |
| 8853     | KTGF     | EchoStar10 110W TP 04 Spotbeam 36       |
| 8856     | PBS      | EchoStar7 119W TP 08 ConUS beam         |
| 8860     | WPBF     | EchoStar7 119W TP 01 South Florida beam |
| 8861     | WPEC     | EchoStar7 119W TP 01 South Florida beam |
| 8862     | WPTV     | EchoStar7 119W TP 01 South Florida beam |
| 8863     | WFLX     | EchoStar7 119W TP 01 South Florida beam |
| 8865     | WTVX     | EchoStar7 119W TP 01 South Florida beam |
| 8866     | WXEL     | EchoStar7 119W TP 01 South Florida beam |
| 8867     | WFGC     | EchoStar7 119W TP 01 South Florida beam |
| 8871     | WPXP     | EchoStar7 119W TP 01 South Florida beam |
| 8872     | WWHB(NA) | EchoStar7 119W TP 01 South Florida beam |
| 8880     | KLTV     | EchoStar10 110W TP 20 Spotbeam 21       |
| 8881     | KYTX     | EchoStar10 110W TP 20 Spotbeam 21       |
| 8882     | KETK     | EchoStar10 110W TP 20 Spotbeam 21       |
| 8883     | KFXK     | EchoStar10 110W TP 20 Spotbeam 21       |
| 8886     | KERA     | EchoStar10 110W TP 20 Spotbeam 21       |
| 8888     | KUOK     | EchoStar10 110W TP 25 Spotbeam 25(OK)   |

| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 8889     | KOPX | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8890     | KOCO | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8891     | KWTV | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8892     | KFOR | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8893     | KOKH | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8894     | KOCB | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8895     | KAUT | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8896     | KETA | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8897     | KSBI | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8899     | KTUZ | EchoStar10 110W TP 25 Spotbeam 25(OK)       |
| 8900     | KITV | EchoStar7 119W TP 09 Hawaii beam            |
| 8901     | KGMB | EchoStar7 119W TP 09 Hawaii beam            |
| 8902     | KHNL | EchoStar7 119W TP 09 Hawaii beam            |
| 8903     | KHON | EchoStar7 119W TP 09 Hawaii beam            |
| 8904     | KFVE | EchoStar7 119W TP 09 Hawaii beam            |
| 8905     | KHET | EchoStar7 119W TP 09 Hawaii beam            |
| 8906     | KBFD | EchoStar7 119W TP 09 Hawaii beam            |
| 8907     | KWHE | EchoStar7 119W TP 09 Hawaii beam            |
| 8908     | KIKU | EchoStar7 119W TP 09 Hawaii beam            |
| 8912     | KIII | EchoStar10 110W TP 27 Spotbeam 17           |
| 8913     | KZTV | EchoStar10 110W TP 27 Spotbeam 17           |
| 8914     | KRIS | EchoStar10 110W TP 27 Spotbeam 17           |
| 8915     | KDF  | EchoStar10 110W TP 27 Spotbeam 17           |
| 8916     | KEDT | EchoStar10 110W TP 27 Spotbeam 17           |
| 8917     | KORO | EchoStar10 110W TP 27 Spotbeam 17           |
| 8920     | KTUL | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8921     | KOTV | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8922     | KJRH | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8923     | KOKI | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8924     | KQCW | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8925     | KMYT | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8926     | KOED | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8927     | KGEB | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |
| 8928     | KWHB | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR) |

| Channel# | Name | Satellite/Beam                                 |
|----------|------|--|
| 8929     | KTPX | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR)    |
| 8930     | KRSC | EchoStar10 110W TP 04 Spotbeam 20(OK,MO,AR)    |
| 8935     | WVNY | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)       |
| 8936     | WCAX | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)       |
| 8937     | WPTZ | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)       |
| 8938     | WFFF | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)       |
| 8941     | WETK | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)       |
| 8942     | WCFE | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 8943     | WNNE | EchoStar10 110W TP 23 Spotbeam 08(ME,VT)       |
| 8944     | WLED | EchoStar10 110W TP 26 Spotbeam 04(MA,VT,PA,NY) |
| 8950     | KGUN | EchoStar7 119W TP 07 Arizona beam              |
| 8951     | KOLD | EchoStar7 119W TP 07 Arizona beam              |
| 8952     | KVOA | EchoStar7 119W TP 07 Arizona beam              |
| 8953     | KMSB | EchoStar7 119W TP 07 Arizona beam              |
| 8954     | KWBA | EchoStar7 119W TP 07 Arizona beam              |
| 8955     | KTTU | EchoStar7 119W TP 07 Arizona beam              |
| 8956     | KUAT | EchoStar7 119W TP 07 Arizona beam              |
| 8957     | KUVE | EchoStar7 119W TP 07 Arizona beam              |
| 8958     | KHRR | EchoStar7 119W TP 07 Arizona beam              |
| 8965     | KFSN | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8966     | KGPE | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8967     | KSEE | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8968     | KMPH | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8969     | KFRE | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8970     | KAIL | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8971     | KVPT | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8972     | KFTV | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8973     | KNSO | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8974     | KGMC | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8975     | KTFF | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8976     | KNXT | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8977     | KMSG | EchoStar10 110W TP 04 Spotbeam 38(NV)          |
| 8985     | KXXV | EchoStar7 119W TP 05 Texas beam                |
| 8986     | KWTX | EchoStar7 119W TP 05 Texas beam                |



| Channel# | Name  | Satellite/Beam                                 |
|----------|-------|--|
| 8987     | KCEN  | EchoStar7 119W TP 05 Texas beam                |
| 8988     | KWKT  | EchoStar7 119W TP 05 Texas beam                |
| 8991     | KNCT  | EchoStar7 119W TP 05 Texas beam                |
| 8992     | KWBU  | EchoStar7 119W TP 05 Texas beam                |
| 8993     | KXXVD | EchoStar7 119W TP 05 Texas beam                |
| 9000     | KOLO  | EchoStar7 119W TP 05 North California beam     |
| 9001     | KTVN  | EchoStar7 119W TP 05 North California beam     |
| 9002     | KRNV  | EchoStar7 119W TP 05 North California beam     |
| 9003     | KRXI  | EchoStar7 119W TP 05 North California beam     |
| 9004     | KREN  | EchoStar7 119W TP 05 North California beam     |
| 9005     | KAME  | EchoStar7 119W TP 05 North California beam     |
| 9006     | KNPB  | EchoStar7 119W TP 05 North California beam     |
| 9007     | KAZR  | EchoStar7 119W TP 05 North California beam     |
| 9015     | WHTM  | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 9016     | WHP   | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 9017     | WGAL  | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 9018     | WPMT  | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 9020     | WLYH  | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 9021     | WITF  | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 9022     | WGCB  | EchoStar10 110W TP 18 Spotbeam 04(MA,VT,PA,NY) |
| 9030     | KTNV  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9031     | KLAS  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9032     | KVBC  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9033     | KVVU  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9034     | KVMY  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9036     | KLVS  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9037     | KINC  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9038     | KBLR  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9039     | KVCW  | EchoStar10 110W TP 12 Spotbeam 38(NV)          |
| 9050     | WJXX  | EchoStar10 110W TP 23 Spotbeam 03(FL,GA)       |
| 9051     | WTEV  | EchoStar10 110W TP 23 Spotbeam 03(FL,GA)       |
| 9052     | WTLV  | EchoStar10 110W TP 23 Spotbeam 03(FL,GA)       |
| 9053     | WAWS  | EchoStar10 110W TP 23 Spotbeam 03(FL,GA)       |
| 9054     | WCWJ  | EchoStar10 110W TP 23 Spotbeam 03(FL,GA)       |

| Channel# | Name  | Satellite/Beam                                    |
|----------|-------|---|
| 9056     | WJCT  | EchoStar10 110W TP 23 Spotbeam 03(FL,GA)          |
| 9057     | WJXT  | EchoStar10 110W TP 23 Spotbeam 03(FL,GA)          |
| 9058     | WXGA  | EchoStar7 119W TP 07 Carolinas beam               |
| 9065     | KRDO  | EchoStar10 110W TP 04 Spotbeam 30(CO)             |
| 9066     | KKTV  | EchoStar10 110W TP 04 Spotbeam 30(CO)             |
| 9067     | KOAA  | EchoStar10 110W TP 04 Spotbeam 30(CO)             |
| 9068     | KXRM  | EchoStar10 110W TP 04 Spotbeam 30(CO)             |
| 9070     | KXTU  | EchoStar10 110W TP 04 Spotbeam 30(CO)             |
| 9071     | KTSC  | EchoStar10 110W TP 04 Spotbeam 30(CO)             |
| 9072     | KZCO  | EchoStar10 110W TP 12 Spotbeam 30(CO)             |
| 9080     | KRCR  | EchoStar10 110W TP 26 Spotbeam 43(CA)             |
| 9081     | KHSL  | EchoStar10 110W TP 26 Spotbeam 43(CA)             |
| 9082     | KNVN  | EchoStar10 110W TP 26 Spotbeam 43(CA)             |
| 9083     | KCVU  | EchoStar10 110W TP 26 Spotbeam 43(CA)             |
| 9084     | KHSLD | EchoStar10 110W TP 26 Spotbeam 43(CA)             |
| 9085     | KRVU  | EchoStar10 110W TP 20 Spotbeam 43(CA)             |
| 9086     | KIXE  | EchoStar10 110W TP 20 Spotbeam 43(CA)             |
| 9087     | KWYB  | EchoStar10 110W TP 29 Spotbeam 37                 |
| 9088     | KBZK  | EchoStar10 110W TP 29 Spotbeam 37                 |
| 9089     | KTVM  | EchoStar10 110W TP 29 Spotbeam 37                 |
| 9090     | KBTZ  | EchoStar10 110W TP 29 Spotbeam 37                 |
| 9091     | KUSM  | EchoStar10 110W TP 29 Spotbeam 37                 |
| 9095     | WHAS  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9096     | WLKY  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9097     | WAVE  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9098     | WDRB  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9099     | WBKI  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9100     | WMYO  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9101     | WKPC  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9102     | WKMJ  | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH)       |
| 9103     | WBNA  | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH)       |
| 9110     | WOI   | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9111     | KCCI  | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9112     | WHO   | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |

| Channel# | Name | Satellite/Beam                                    |
|----------|------|---|
| 9113     | KDSM | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9114     | KCWI | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9116     | KDIN | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9117     | KFPX | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9125     | WKBW | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9126     | WIVB | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9127     | WGRZ | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9128     | WUTV | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9129     | WNYO | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9131     | WNED | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9132     | WNLO | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9133     | WNYB | EchoStar10 110W TP 27 Spotbeam 09                 |
| 9140     | KETV | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9141     | KMTV | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9142     | WOWT | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9143     | KPTM | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9144     | KXVO | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9146     | KDIN | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9147     | KYNE | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9155     | KCRG | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 9156     | KGAN | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 9157     | KWWL | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 9158     | KFXA | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 9159     | KWKB | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 9161     | KDIN | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 9162     | KPXR | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 9170     | KXLY | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 9171     | KREM | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 9172     | KHQ  | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 9173     | KAYU | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 9174     | KSKN | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 9175     | KQUP | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 9176     | KSPS | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 9177     | KWSU | EchoStar10 110W TP 18 Spotbeam 40(WA)             |

| Channel# | Name | Satellite/Beam                              |
|----------|------|---|
| 9178     | KCDT | EchoStar10 110W TP 18 Spotbeam 40(WA)       |
| 9179     | KGPX | EchoStar10 110W TP 18 Spotbeam 40(WA)       |
| 9187     | KION | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 9188     | KSBW | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 9189     | KCBA | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 9190     | KCAH | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 9192     | KMCE | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 9194     | KSMS | EchoStar10 110W TP 23 Spotbeam 42(CA)       |
| 9195     | WAAY | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)    |
| 9196     | WHNT | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)    |
| 9197     | WAFF | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)    |
| 9198     | WZDX | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)    |
| 9199     | WHIQ | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)    |
| 9201     | WHDF | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)    |
| 9205     | WTVQ | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH) |
| 9206     | WKYT | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH) |
| 9207     | WLEX | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH) |
| 9208     | WDKY | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH) |
| 9211     | WKLE | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH) |
| 9212     | WLJC | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH) |
| 9215     | WZVN | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9216     | WINK | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9217     | WBBH | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9218     | WFTX | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9219     | WTVK | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9220     | WEVU | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9221     | WGCU | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9222     | WRXY | EchoStar10 110W TP 04 Spotbeam 01(FL)       |
| 9230     | KSFY | EchoStar10 110W TP 23 Spotbeam 32           |
| 9231     | KELO | EchoStar10 110W TP 23 Spotbeam 32           |
| 9232     | KDLT | EchoStar10 110W TP 23 Spotbeam 32           |
| 9233     | KTTW | EchoStar10 110W TP 23 Spotbeam 32           |
| 9236     | KCSD | EchoStar10 110W TP 23 Spotbeam 32           |
| 9237     | KWSD | EchoStar10 110W TP 23 Spotbeam 32           |

| Channel# | Name  | Satellite/Beam                                    |
|----------|-------|---|
| 9239     | KSMN  | EchoStar10 110W TP 23 Spotbeam 32                 |
| 9245     | WNEP  | EchoStar7 119W TP 01 Northeast beam               |
| 9246     | WYOU  | EchoStar7 119W TP 01 Northeast beam               |
| 9247     | WBRE  | EchoStar7 119W TP 01 Northeast beam               |
| 9248     | WOLF  | EchoStar7 119W TP 01 Northeast beam               |
| 9249     | WSWB  | EchoStar7 119W TP 01 Northeast beam               |
| 9251     | WVIA  | EchoStar7 119W TP 01 Northeast beam               |
| 9255     | WSIL  | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 9256     | KFVS  | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 9257     | WPSD  | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 9258     | KBSI  | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 9259     | WDKA  | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 9261     | WKPC  | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 9262     | WTCT  | EchoStar10 110W TP 25 Spotbeam 14(KY,IN)          |
| 9264     | WSIU  | EchoStar8 110W TP 05 ConUS beam                   |
| 9270     | WAPT  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 9271     | WJTV  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 9272     | WLBT  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 9273     | WUFX  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 9274     | WDBD  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 9275     | WRBJ  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 9276     | WMPN  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)          |
| 9280     | WSET  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9281     | WDBJ  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9282     | WSLS  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9283     | WFXR  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9284     | WWCW  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9285     | WDRL  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9286     | WBRA  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9290     | WTXL  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA)          |
| 9291     | WCTV  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA)          |
| 9292     | WTWC  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA)          |
| 9293     | WTLH  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA)          |
| 9295     | WTLFD | EchoStar10 110W TP 25 Spotbeam 03(FL,GA)          |

| Channel# | Name  | Satellite/Beam                              |
|----------|-------|---|
| 9296     | WFSU  | EchoStar10 110W TP 25 Spotbeam 03(FL,GA)    |
| 9302     | WTOK  | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)    |
| 9303     | WMDN  | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)    |
| 9304     | WGBC  | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)    |
| 9305     | WTOKD | EchoStar10 110W TP 31 Spotbeam 11(AL,MS)    |
| 9308     | WMAW  | EchoStar10 110W TP 26 Spotbeam 11(AL,MS)    |
| 9310     | WATE  | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 9311     | WVLT  | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 9312     | WBIR  | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 9313     | WTNZ  | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 9314     | WBXX  | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 9316     | WKOP  | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 9318     | WVLR  | EchoStar10 110W TP 12 Spotbeam 10(TN,KY,OH) |
| 9322     | KESQ  | EchoStar10 110W TP 31 Spotbeam 39           |
| 9323     | KPSP  | EchoStar10 110W TP 31 Spotbeam 39           |
| 9324     | KMIR  | EchoStar10 110W TP 31 Spotbeam 39           |
| 9325     | KDFX  | EchoStar10 110W TP 31 Spotbeam 39           |
| 9326     | KCWQ  | EchoStar10 110W TP 31 Spotbeam 39           |
| 9327     | KUNA  | EchoStar10 110W TP 31 Spotbeam 39           |
| 9328     | PBS   | EchoStar7 119W TP 08 ConUS beam             |
| 9330     | WBAY  | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)    |
| 9331     | WFRV  | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)    |
| 9332     | WGBA  | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)    |
| 9333     | WLUK  | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)    |
| 9334     | WIWB  | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)    |
| 9335     | WACY  | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)    |
| 9336     | WPNE  | EchoStar10 110W TP 23 Spotbeam 23(IA,WI)    |
| 9340     | KSVI  | EchoStar2 148W TP 18 ConUS beam             |
| 9341     | KTVQ  | EchoStar2 148W TP 18 ConUS beam             |
| 9342     | KULR  | EchoStar2 148W TP 18 ConUS beam             |
| 9343     | KHMT  | EchoStar2 148W TP 18 ConUS beam             |
| 9346     | PBS   | EchoStar7 119W TP 08 ConUS beam             |
| 9350     | KATV  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)    |
| 9351     | KTHV  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)    |

| Channel# | Name  | Satellite/Beam                                    |
|----------|-------|---|
| 9352     | KARK  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)          |
| 9353     | KLRT  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)          |
| 9354     | KWBF  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)          |
| 9355     | KASN  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)          |
| 9356     | KETS  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)          |
| 9357     | KVTN  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)          |
| 9358     | KKYK  | EchoStar10 110W TP 18 Spotbeam 15(LA,AR)          |
| 9365     | KAPP  | EchoStar10 110W TP 12 Spotbeam 45(WA)             |
| 9366     | KIMA  | EchoStar10 110W TP 12 Spotbeam 45(WA)             |
| 9367     | KNDU  | EchoStar10 110W TP 12 Spotbeam 45(WA)             |
| 9368     | KCYU  | EchoStar10 110W TP 12 Spotbeam 45(WA)             |
| 9371     | KYVE  | EchoStar10 110W TP 12 Spotbeam 45(WA)             |
| 9372     | KTNW  | EchoStar10 110W TP 12 Spotbeam 45(WA)             |
| 9373     | KCWK  | EchoStar10 110W TP 12 Spotbeam 45(WA)             |
| 9378     | KJUD  | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 9379     | KTNL  | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 9380     | KATH  | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 9383     | KTOO  | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 9384     | ALSKA | EchoStar10 110W TP 26 Spotbeam 46(AK)             |
| 9385     | WRIC  | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9386     | WTVR  | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9387     | WWBT  | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9388     | WRLH  | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9390     | WUPV  | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9391     | WCVE  | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9392     | WCVW  | EchoStar10 110W TP 23 Spotbeam 05(NC,VA,SC,DC,MD) |
| 9396     | COLRS | EchoStar8 110W TP 03 ConUS beam                   |
| 9397     | BYUTV | EchoStar8 110W TP 03 ConUS beam                   |
| 9398     | RFDTV | EchoStar8 110W TP 19 ConUS beam                   |
| 9400     | RSRCH | EchoStar8 110W TP 03 ConUS beam                   |
| 9401     | HITN  | EchoStar8 110W TP 03 ConUS beam                   |
| 9402     | HHS   | EchoStar1 148W TP 03 ConUS beam                   |
| 9402     | HHS   | EchoStar3 61.5W TP 10 ConUS beam                  |
| 9403     | BYUTV | EchoStar8 110W TP 03 ConUS beam                   |

| Channel# | Name     | Satellite/Beam                   |
|----------|----------|----------------------------------|
| 9404     | UWTV     | EchoStar8 110W TP 03 ConUS beam  |
| 9405     | PNTGN    | EchoStar2 148W TP 24 ConUS beam  |
| 9405     | PNTGN    | Rainbow 1 61.5W TP 15 ConUS beam |
| 9406     | ARTS     | EchoStar2 148W TP 24 ConUS beam  |
| 9406     | ARTS     | Rainbow 1 61.5W TP 15 ConUS beam |
| 9407     | COLRS    | EchoStar8 110W TP 03 ConUS beam  |
| 9409     | RFDTV    | EchoStar8 110W TP 19 ConUS beam  |
| 9410     | LINK     | EchoStar8 110W TP 10 ConUS beam  |
| 9411     | NAUHS    | EchoStar7 119W TP 11 ConUS beam  |
| 9412     | UCTV     | EchoStar7 119W TP 11 ConUS beam  |
| 9413     | ALMA(NA) | EchoStar5 129W TP 21 ConUS beam  |
| 9413     | ALMA(NA) | EchoStar3 61.5W TP 10 ConUS beam |
| 9415     | FSTV     | EchoStar8 110W TP 10 ConUS beam  |
| 9416     | GSN      | EchoStar1 148W TP 19 ConUS beam  |
| 9416     | GSN      | EchoStar3 61.5W TP 29 ConUS beam |
| 9418     | PAEC     | EchoStar1 148W TP 19 ConUS beam  |
| 9418     | PAEC     | EchoStar3 61.5W TP 29 ConUS beam |
| 9419     | AE       | EchoStar5 129W TP 27 ConUS beam  |
| 9419     | AE       | EchoStar3 61.5W TP 22 ConUS beam |
| 9420     | TNTHD    | EchoStar8 110W TP 13 ConUS beam  |
| 9421     | DSCHD    | EchoStar8 110W TP 17 ConUS beam  |
| 9422     | HDNET    | EchoStar8 110W TP 07 ConUS beam  |
| 9423     | HDNMV    | EchoStar8 110W TP 07 ConUS beam  |
| 9424     | ESPHD    | EchoStar8 110W TP 17 ConUS beam  |
| 9425     | ES2HD    | EchoStar5 129W TP 30 ConUS beam  |
| 9425     | ES2HD    | EchoStar3 61.5W TP 02 ConUS beam |
| 9426     | NFLHD    | EchoStar5 129W TP 30 ConUS beam  |
| 9426     | NFLHD    | EchoStar3 61.5W TP 02 ConUS beam |
| 9427     | UNIHD    | EchoStar5 129W TP 27 ConUS beam  |
| 9427     | UNIHD    | EchoStar3 61.5W TP 22 ConUS beam |
| 9428     | HDPPV    | EchoStar1 148W TP 13 ConUS beam  |
| 9429     | NTGHD    | EchoStar5 129W TP 30 ConUS beam  |
| 9429     | NTGHD    | EchoStar3 61.5W TP 02 ConUS beam |
| 9430     | SHOHD    | EchoStar1 148W TP 17 ConUS beam  |



| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 9435     | STZHD     | EchoStar5 129W TP 30 ConUS beam  |
| 9435     | STZHD     | EchoStar3 61.5W TP 02 ConUS beam |
| 9440     | HBOHD     | EchoStar1 148W TP 17 ConUS beam  |
| 9443     | HDTV3     | EchoStar3 61.5W TP 20 ConUS beam |
| 9456     | HBOHD     | EchoStar8 110W TP 13 ConUS beam  |
| 9460     | SHOHD     | EchoStar8 110W TP 17 ConUS beam  |
| 9461     | HGHD      | EchoStar5 129W TP 30 ConUS beam  |
| 9461     | HGHD      | EchoStar3 61.5W TP 02 ConUS beam |
| 9462     | FOOD      | EchoStar5 129W TP 30 ConUS beam  |
| 9462     | FOOD      | EchoStar3 61.5W TP 02 ConUS beam |
| 9463     | NHLHD(NA) | EchoStar8 110W TP 13 ConUS beam  |
| 9465     | HDEV1     | EchoStar8 110W TP 13 ConUS beam  |
| 9466     | NBAHD     | EchoStar8 110W TP 13 ConUS beam  |
| 9467     | HDPPV     | EchoStar8 110W TP 13 ConUS beam  |
| 9470     | RAVE      | EchoStar5 129W TP 31 ConUS beam  |
| 9470     | RAVE      | Rainbow 1 61.5W TP 13 ConUS beam |
| 9471     | EQUTR     | EchoStar5 129W TP 23 ConUS beam  |
| 9471     | EQUTR     | Rainbow 1 61.5W TP 07 ConUS beam |
| 9472     | GLLRY     | EchoStar5 129W TP 06 ConUS beam  |
| 9472     | GLLRY     | Rainbow 1 61.5W TP 01 ConUS beam |
| 9473     | TRESR     | EchoStar5 129W TP 11 ConUS beam  |
| 9473     | TRESR     | Rainbow 1 61.5W TP 09 ConUS beam |
| 9474     | ANIMA     | EchoStar5 129W TP 31 ConUS beam  |
| 9474     | ANIMA     | Rainbow 1 61.5W TP 13 ConUS beam |
| 9475     | WORLD     | EchoStar5 129W TP 11 ConUS beam  |
| 9475     | WORLD     | Rainbow 1 61.5W TP 09 ConUS beam |
| 9476     | RUSH      | EchoStar5 129W TP 06 ConUS beam  |
| 9476     | RUSH      | Rainbow 1 61.5W TP 01 ConUS beam |
| 9477     | WSPOR     | EchoStar5 129W TP 11 ConUS beam  |
| 9477     | WSPOR     | Rainbow 1 61.5W TP 09 ConUS beam |
| 9478     | ULTRA     | EchoStar5 129W TP 06 ConUS beam  |
| 9478     | ULTRA     | Rainbow 1 61.5W TP 01 ConUS beam |
| 9479     | KNGFU     | EchoStar5 129W TP 22 ConUS beam  |
| 9479     | KNGFU     | Rainbow 1 61.5W TP 03 ConUS beam |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 9480     | FILMF | EchoStar5 129W TP 31 ConUS beam  |
| 9480     | FILMF | Rainbow 1 61.5W TP 13 ConUS beam |
| 9481     | MNSTR | EchoStar5 129W TP 23 ConUS beam  |
| 9481     | MNSTR | Rainbow 1 61.5W TP 07 ConUS beam |
| 9482     | HDNWS | EchoStar5 129W TP 22 ConUS beam  |
| 9482     | HDNWS | Rainbow 1 61.5W TP 03 ConUS beam |
| 9485     | GAMEP | EchoStar5 129W TP 22 ConUS beam  |
| 9485     | GAMEP | Rainbow 1 61.5W TP 03 ConUS beam |
| 9486     | FAMLY | EchoStar5 129W TP 23 ConUS beam  |
| 9486     | FAMLY | Rainbow 1 61.5W TP 07 ConUS beam |
| 9500     | IWTHR | EchoStar7 119W TP 04 ConUS beam  |
| 9601     | BTV   | EchoStar8 110W TP 10 ConUS beam  |
| 9602     | BTV   | EchoStar7 119W TP 11 ConUS beam  |
| 9603     | DNBS  | EchoStar9 121W TP 13 ConUS beam  |
| 9611     | BTV   | EchoStar8 110W TP 10 ConUS beam  |
| 9612     | BTV   | EchoStar8 110W TP 14 ConUS beam  |
| 9615     | BTV   | EchoStar8 110W TP 13 ConUS beam  |
| 9621     | BTV   | EchoStar2 148W TP 26 ConUS beam  |
| 9621     | BTV   | Rainbow 1 61.5W TP 23 ConUS beam |
| 9622     | BTV   | EchoStar2 148W TP 26 ConUS beam  |
| 9622     | BTV   | Rainbow 1 61.5W TP 23 ConUS beam |
| 9630     | BTV   | EchoStar9 121W TP 25 ConUS beam  |
| 9631     | BTV   | EchoStar9 121W TP 25 ConUS beam  |
| 9633     | BTV   | EchoStar9 121W TP 13 ConUS beam  |
| 9635     | BTV   | EchoStar9 121W TP 13 ConUS beam  |
| 9637     | PTST1 | EchoStar1 148W TP 03 ConUS beam  |
| 9638     | CLH   | EchoStar9 121W TP 13 ConUS beam  |
| 9650     | HDBTV | EchoStar9 121W TP 20 ConUS beam  |
| 9680     | DPOP  | EchoStar2 148W TP 26 ConUS beam  |
| 9680     | DPOP  | Rainbow 1 61.5W TP 23 ConUS beam |
| 9692     | R-300 | Rainbow 1 61.5W TP 15 ConUS beam |
| 9701     | ANGEL | EchoStar3 61.5W TP 25 ConUS beam |
| 9702     | ANGL2 | EchoStar3 61.5W TP 32 ConUS beam |
| 9703     | KTV   | EchoStar3 61.5W TP 32 ConUS beam |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 9705     | TVU       | EchoStar3 61.5W TP 25 ConUS beam |
| 9706     | SPRT(NA)  | EchoStar3 61.5W TP 32 ConUS beam |
| 9707     | GUARD     | EchoStar3 61.5W TP 25 ConUS beam |
| 9708     | FAITH     | EchoStar3 61.5W TP 25 ConUS beam |
| 9709     | TRNTY     | EchoStar3 61.5W TP 25 ConUS beam |
| 9710     | 3ABN(NA)  | EchoStar3 61.5W TP 32 ConUS beam |
| 9711     | SAFE      | EchoStar3 61.5W TP 25 ConUS beam |
| 9712     | CORNR     | EchoStar3 61.5W TP 32 ConUS beam |
| 9714     | TLN       | EchoStar3 61.5W TP 32 ConUS beam |
| 9715     | EAGLE(NA) | EchoStar3 61.5W TP 32 ConUS beam |
| 9716     | LBN       | EchoStar3 61.5W TP 25 ConUS beam |
| 9717     | CLAND     | EchoStar3 61.5W TP 25 ConUS beam |
| 9718     | FNC       | EchoStar3 61.5W TP 32 ConUS beam |
| 9720     | HGTV      | EchoStar3 61.5W TP 25 ConUS beam |
| 9729     | HLMK      | EchoStar3 61.5W TP 32 ConUS beam |
| 9730     | HMC       | EchoStar3 61.5W TP 32 ConUS beam |
| 9732     | WRSHF     | EchoStar3 61.5W TP 25 ConUS beam |
| 9750     | 4KIDS     | EchoStar3 61.5W TP 32 ConUS beam |
| 9751     | OASIS     | EchoStar3 61.5W TP 32 ConUS beam |
| 9752     | LSTEN     | EchoStar3 61.5W TP 32 ConUS beam |
| 9753     | RADU      | EchoStar3 61.5W TP 32 ConUS beam |
| 9754     | WAYFM     | EchoStar3 61.5W TP 25 ConUS beam |
| 9755     | CCM       | EchoStar3 61.5W TP 32 ConUS beam |
| 9760     | TALK      | EchoStar3 61.5W TP 25 ConUS beam |
| 9762     | CSN       | EchoStar3 61.5W TP 25 ConUS beam |
| 9764     | ALLWP     | EchoStar3 61.5W TP 25 ConUS beam |
| 9765     | MOODY     | EchoStar3 61.5W TP 25 ConUS beam |
| 9770     | GOSPL     | EchoStar3 61.5W TP 25 ConUS beam |
| 9771     | SACRD     | EchoStar3 61.5W TP 32 ConUS beam |
| 9772     | VOICE     | EchoStar3 61.5W TP 25 ConUS beam |
| 9773     | Z-73      | EchoStar3 61.5W TP 25 ConUS beam |
| 9780     | NUEVA     | EchoStar3 61.5W TP 32 ConUS beam |
| 9781     | BOTT      | EchoStar3 61.5W TP 32 ConUS beam |
| 9800     | SPORT     | EchoStar7 119W TP 12 ConUS beam  |

| Channel# | Name      | Satellite/Beam                             |
|----------|-----------|--|
| 9801     | SPORT     | EchoStar7 119W TP 10 ConUS beam            |
| 9850     | KBS       | AMC-16 118.7W TP 17 ConUS beam             |
| 9850     | KBS       | EchoStar9 121W TP 15 ConUS beam            |
| 9853     | TST76(NA) | EchoStar8 110W TP 19 ConUS beam            |
| 9900     | D500      | EchoStar8 110W TP 10 ConUS beam            |
| 9901     | D1000     | EchoStar5 129W TP 17 ConUS beam            |
| 9902     | D61.5     | EchoStar3 61.5W TP 31 ConUS beam           |
| 9903     | D118      | AMC-16 118.7W TP 07 ConUS beam             |
| 9904     | D148      | EchoStar1 148W TP 15 ConUS beam            |
| 9905     | D121      | EchoStar9 121W TP 25 ConUS beam            |
| 9940     | SOON      | EchoStar8 110W TP 14 ConUS beam            |
| 9941     | SOON(NA)  | EchoStar8 110W TP 14 ConUS beam            |
| 9942     | SOON2     | EchoStar7 119W TP 16 ConUS beam            |
| 9943     | SOON2(NA) | EchoStar7 119W TP 16 ConUS beam            |
| 9945     | DVRDN(NA) | EchoStar8 110W TP 02 ConUS beam            |
| 9946     | DVRVR(NA) | EchoStar8 110W TP 02 ConUS beam            |
| 9947     | SOON3     | EchoStar8 110W TP 14 ConUS beam            |
| 9948     | SOON4     | EchoStar7 119W TP 16 ConUS beam            |
| 9996     | ECC       | EchoStar2 148W TP 26 ConUS beam            |
| 9996     | ECC       | Rainbow 1 61.5W TP 23 ConUS beam           |
| 9998     | ISG       | EchoStar8 110W TP 08 ConUS beam            |
| 14002    | KRMA1(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14003    | KBDI2(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14004    | KBDI3(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14005    | KABC2(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14006    | KABC3(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14007    | KCET1(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14008    | KMEX2(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14009    | KLCS2(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14010    | KLCS3(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14011    | KLCS4(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14012    | KXLA2(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14013    | KVMD1(NA) | EchoStar8 110W TP 08 ConUS beam            |
| 14014    | KOCE1(NA) | EchoStar7 119W TP 01 South California beam |

| Channel# | Name      | Satellite/Beam                              |
|----------|-----------|---|
| 14015    | KQED1(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14016    | KQED2(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14017    | KQED3(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14018    | KQED4(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14019    | KQED5(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14021    | KFSF1(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14022    | KRCB1(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14023    | KRCB2(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14026    | KTLN1(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14033    | WLS2(NA)  | EchoStar10 110W TP 31 Spotbeam 19           |
| 14041    | WWJ2(NA)  | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH) |
| 14042    | WWJ3(NA)  | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH) |
| 14043    | WWJ4(NA)  | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH) |
| 14044    | WWJ5(NA)  | EchoStar10 110W TP 12 Spotbeam 13(IN,MI,OH) |
| 14066    | WNET3(NA) | EchoStar7 119W TP 01 Northeast beam         |
| 14068    | WNET1(NA) | EchoStar7 119W TP 01 Northeast beam         |
| 14069    | WNET2(NA) | EchoStar7 119W TP 01 Northeast beam         |
| 14079    | WCEU2(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14080    | WCEU3(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14081    | WCEU4(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14082    | WFTV2(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14083    | WKMG2(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14085    | WMFE2(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14095    | KAET1(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14097    | KSAZ2(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14099    | KOVR2(NA) | EchoStar8 110W TP 16 ConUS beam             |
| 14102    | KVIE1(NA) | EchoStar8 110W TP 16 ConUS beam             |
| 14103    | KVIE2(NA) | EchoStar8 110W TP 16 ConUS beam             |
| 14113    | KTWB2(NA) | EchoStar7 119W TP 03 Northwest beam         |
| 14123    | WETA1(NA) | EchoStar7 119W TP 03 Northeast beam         |
| 14124    | WETA2(NA) | EchoStar7 119W TP 03 Northeast beam         |
| 14125    | WETA3(NA) | EchoStar7 119W TP 03 Northeast beam         |
| 14126    | WETA4(NA) | EchoStar7 119W TP 03 Northeast beam         |
| 14127    | WNVC2(NA) | EchoStar7 119W TP 03 Northeast beam         |

| Channel# | Name      | Satellite/Beam                                    |
|----------|-----------|---|
| 14179    | KCPT2(NA) | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14182    | WMAV2(NA) | EchoStar10 110W TP 20 Spotbeam 14(KY,IN)          |
| 14210    | KUED2(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14211    | KUED3(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14212    | KBYU3(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14215    | KUEN1(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14216    | KUEN2(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14284    | WEIQ1(NA) | EchoStar10 110W TP 29 Spotbeam 11(AL,MS)          |
| 14295    | WPRI2(NA) | EchoStar3 61.5W TP 16 ConUS beam                  |
| 14301    | WBRA2(NA) | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14302    | WBRA5(NA) | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14303    | WDBJ2(NA) | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14304    | WDBJ3(NA) | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14341    | KISU2(NA) | EchoStar10 110W TP 29 Spotbeam 37                 |
| 14342    | KISU5(NA) | EchoStar10 110W TP 29 Spotbeam 37                 |
| 14343    | KISU3(NA) | EchoStar10 110W TP 29 Spotbeam 37                 |
| 14344    | KISU4(NA) | EchoStar10 110W TP 29 Spotbeam 37                 |
| 14355    | KYNE1(NA) | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14356    | KYNE2(NA) | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14357    | KYNE3(NA) | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14358    | KYNE5(NA) | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14364    | KHQ2(NA)  | EchoStar10 110W TP 18 Spotbeam 40(WA)             |
| 14374    | WIS2(NA)  | EchoStar7 119W TP 07 Carolinas beam               |
| 14375    | WIS3(NA)  | EchoStar7 119W TP 07 Carolinas beam               |
| 14378    | WRJA2(NA) | EchoStar7 119W TP 07 Carolinas beam               |
| 14379    | WRJA3(NA) | EchoStar7 119W TP 07 Carolinas beam               |
| 14384    | WHA1(NA)  | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)          |
| 14437    | KELO2(NA) | EchoStar10 110W TP 23 Spotbeam 32                 |
| 14438    | KCSD1(NA) | EchoStar10 110W TP 23 Spotbeam 32                 |
| 14468    | KXNE1(NA) | AMC-15 105W TP 23 ConUS beam                      |
| 14469    | KXNE2(NA) | AMC-15 105W TP 23 ConUS beam                      |
| 14470    | KXNE3(NA) | AMC-15 105W TP 23 ConUS beam                      |
| 14471    | KXNE5(NA) | AMC-15 105W TP 23 ConUS beam                      |
| 14478    | KDEV2(NA) | EchoStar1 148W TP 21 ConUS beam                   |

| Channel# | Name      | Satellite/Beam                              |
|----------|-----------|---|
| 14479    | KTNE1(NA) | EchoStar1 148W TP 21 ConUS beam             |
| 14480    | KTNE2(NA) | EchoStar1 148W TP 21 ConUS beam             |
| 14481    | KTNE3(NA) | EchoStar1 148W TP 21 ConUS beam             |
| 14482    | KTNE5(NA) | EchoStar1 148W TP 21 ConUS beam             |
| 14489    | KBHE1(NA) | EchoStar2 148W TP 12 ConUS beam             |
| 14490    | KRNE1(NA) | EchoStar2 148W TP 12 ConUS beam             |
| 14491    | KRNE2(NA) | EchoStar2 148W TP 12 ConUS beam             |
| 14492    | KRNE3(NA) | EchoStar2 148W TP 12 ConUS beam             |
| 14516    | KDEV3(NA) | EchoStar1 148W TP 21 ConUS beam             |
| 14517    | KDEV4(NA) | EchoStar1 148W TP 21 ConUS beam             |
| 14518    | KDEV5(NA) | EchoStar1 148W TP 21 ConUS beam             |
| 14535    | KWGN2(NA) | EchoStar7 119W TP 20 ConUS beam             |
| 14560    | WBNA2(NA) | EchoStar10 110W TP 04 Spotbeam 10(TN,KY,OH) |
| 14582    | WBCC3(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14583    | WBCC4(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)       |
| 14589    | WNAC2(NA) | EchoStar3 61.5W TP 16 ConUS beam            |
| 14594    | WMTV2(NA) | EchoStar10 110W TP 25 Spotbeam 23(IA,WI)    |
| 14595    | WMC2(NA)  | EchoStar10 110W TP 20 Spotbeam 14(KY,IN)    |
| 14601    | KSIN1(NA) | AMC-15 105W TP 23 ConUS beam                |
| 14603    | WPXX2(NA) | EchoStar10 110W TP 20 Spotbeam 14(KY,IN)    |
| 14608    | ATLK1(NA) | EchoStar7 119W TP 18 ConUS beam             |
| 14609    | ATLK2(NA) | EchoStar7 119W TP 18 ConUS beam             |
| 14610    | KXRM2(NA) | EchoStar8 110W TP 08 ConUS beam             |
| 14617    | WPXM2(NA) | EchoStar7 119W TP 03 South Florida beam     |
| 14619    | WGCL2(NA) | EchoStar8 110W TP 19 ConUS beam             |
| 14620    | WGCL3(NA) | EchoStar8 110W TP 19 ConUS beam             |
| 14621    | WTBS2(NA) | EchoStar10 110W TP 20 Spotbeam 06           |
| 14622    | WXIA2(NA) | EchoStar8 110W TP 19 ConUS beam             |
| 14644    | WWWB2(NA) | EchoStar10 110W TP 26 Spotbeam 06           |
| 14647    | WLS3(NA)  | EchoStar10 110W TP 31 Spotbeam 19           |
| 14650    | WDEF2(NA) | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 14651    | WFLI2(NA) | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 14652    | WRCB2(NA) | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |
| 14653    | WTCI4(NA) | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH) |

| Channel# | Name      | Satellite/Beam                                    |
|----------|-----------|---|
| 14654    | WTVC2(NA) | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH)       |
| 14655    | WLWT2(NA) | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH)       |
| 14656    | WPTO3(NA) | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH)       |
| 14657    | WPTO4(NA) | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH)       |
| 14658    | WPTO5(NA) | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH)       |
| 14659    | WPTO6(NA) | EchoStar10 110W TP 23 Spotbeam 10(TN,KY,OH)       |
| 14660    | KMIZ2(NA) | EchoStar10 110W TP 26 Spotbeam 19                 |
| 14661    | KMIZ3(NA) | EchoStar10 110W TP 26 Spotbeam 19                 |
| 14662    | KMIZ4(NA) | EchoStar10 110W TP 26 Spotbeam 19                 |
| 14663    | WEAO3(NA) | EchoStar10 110W TP 31 Spotbeam 09                 |
| 14666    | WKYC2(NA) | EchoStar10 110W TP 31 Spotbeam 09                 |
| 14667    | WUAB2(NA) | EchoStar10 110W TP 31 Spotbeam 09                 |
| 14668    | WVIZ2(NA) | EchoStar10 110W TP 31 Spotbeam 09                 |
| 14684    | KUSA2(NA) | EchoStar8 110W TP 22 ConUS beam                   |
| 14700    | KDLT2(NA) | EchoStar10 110W TP 23 Spotbeam 32                 |
| 14702    | KHON2(NA) | EchoStar7 119W TP 09 Hawaii beam                  |
| 14716    | WUPN2(NA) | EchoStar10 110W TP 31 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14723    | KHWB2(NA) | EchoStar10 110W TP 04 Spotbeam 16(SE TX)          |
| 14744    | KMOS1(NA) | EchoStar10 110W TP 26 Spotbeam 19                 |
| 14745    | KCPT3(NA) | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14746    | KCPT4(NA) | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14747    | KCTV2(NA) | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14748    | KCTV3(NA) | EchoStar10 110W TP 18 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14751    | KSCI2(NA) | EchoStar7 119W TP 01 South California beam        |
| 14752    | KOCE2(NA) | EchoStar7 119W TP 01 South California beam        |
| 14753    | KNBC2(NA) | EchoStar7 119W TP 20 ConUS beam                   |
| 14754    | KVMD2(NA) | EchoStar7 119W TP 03 South California beam        |
| 14755    | KVMD3(NA) | EchoStar7 119W TP 03 South California beam        |
| 14775    | WMC2(NA)  | EchoStar10 110W TP 20 Spotbeam 14(KY,IN)          |
| 14790    | WEAR2(NA) | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 14791    | WPMI2(NA) | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 14792    | WSRE1(NA) | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 14793    | WSRE2(NA) | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |
| 14794    | WSRE3(NA) | EchoStar10 110W TP 12 Spotbeam 07(AL,FL)          |



| Channel# | Name      | Satellite/Beam                                    |
|----------|-----------|---|
| 14810    | WOWT2(NA) | EchoStar10 110W TP 20 Spotbeam 24(KS,MN,IA,OH,NE) |
| 14811    | WBCC2(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 14812    | WESH2(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 14813    | WMFE3(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 14814    | WMFE4(NA) | EchoStar10 110W TP 31 Spotbeam 01(FL)             |
| 14824    | KNXV2(NA) | EchoStar7 119W TP 05 Arizona beam                 |
| 14825    | KPHO2(NA) | EchoStar7 119W TP 05 Arizona beam                 |
| 14826    | KPHO3(NA) | EchoStar7 119W TP 05 Arizona beam                 |
| 14827    | KPNX2(NA) | EchoStar7 119W TP 05 Arizona beam                 |
| 14828    | KTVW2(NA) | EchoStar7 119W TP 05 Arizona beam                 |
| 14829    | KUTP2(NA) | EchoStar7 119W TP 05 Arizona beam                 |
| 14830    | WCWB2(NA) | EchoStar10 110W TP 29 Spotbeam 09                 |
| 14837    | KGW2(NA)  | EchoStar10 110W TP 27 Spotbeam 44                 |
| 14844    | WJAR2(NA) | EchoStar3 61.5W TP 16 ConUS beam                  |
| 14854    | WSET2(NA) | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14855    | KBYU4(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14876    | KGO2(NA)  | EchoStar10 110W TP 26 Spotbeam 43(CA)             |
| 14877    | KGO3(NA)  | EchoStar10 110W TP 26 Spotbeam 43(CA)             |
| 14882    | KSL2(NA)  | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14883    | KSTU2(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14884    | KTVX3(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14885    | KUPX2(NA) | EchoStar10 110W TP 23 Spotbeam 34(UT)             |
| 14925    | WJLA2(NA) | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14926    | WNVT2(NA) | EchoStar7 119W TP 03 Northeast beam               |
| 14927    | WRC2(NA)  | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14928    | WUSA2(NA) | EchoStar10 110W TP 25 Spotbeam 05(NC,VA,SC,DC,MD) |
| 14929    | WVPY2(NA) | EchoStar7 119W TP 03 Northeast beam               |
| 14930    | WVPY3(NA) | EchoStar7 119W TP 03 Northeast beam               |
| 15001    | WVIR3(NA) | EchoStar10 110W TP 27 Spotbeam 10(TN,KY,OH)       |
| 15003    | WVFX2(NA) | EchoStar10 110W TP 26 Spotbeam 19                 |
| 15004    | WOSU2(NA) | EchoStar10 110W TP 27 Spotbeam 17                 |
| 15012    | WRGT2(NA) | EchoStar10 110W TP 27 Spotbeam 19                 |
| 15039    | WHSV4(NA) | EchoStar7 119W TP 03 Northeast beam               |
| 19000    | CSA(NA)   | EchoStar8 110W TP 08 ConUS beam                   |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 19001    | ORDH(NA)  | EchoStar8 110W TP 15 ConUS beam  |
| 19002    | I-PPV(NA) | EchoStar8 110W TP 06 ConUS beam  |
| 19004    | PRIV(NA)  | EchoStar8 110W TP 08 ConUS beam  |
| 19006    | DHOM2(NA) | EchoStar8 110W TP 08 ConUS beam  |
| 19007    | VODAP(NA) | EchoStar8 110W TP 14 ConUS beam  |
| 19010    | CH101(NA) | EchoStar7 119W TP 17 ConUS beam  |
| 19012    | TVGUI(NA) | EchoStar8 110W TP 02 ConUS beam  |
| 19013    | PPVT(NA)  | EchoStar1 148W TP 23 ConUS beam  |
| 19016    | DHOMV(NA) | EchoStar8 110W TP 08 ConUS beam  |
| 19017    | AAA(NA)   | EchoStar8 110W TP 16 ConUS beam  |
| 19018    | THCAP(NA) | EchoStar8 110W TP 02 ConUS beam  |
| 19026    | WTHR3(NA) | EchoStar8 110W TP 14 ConUS beam  |
| 19027    | BLMBG     | EchoStar8 110W TP 02 ConUS beam  |
| 19029    | BITVV     | EchoStar8 110W TP 02 ConUS beam  |
| 19030    | CNNAP     | EchoStar7 119W TP 19 ConUS beam  |
| 19031    | CNNAV     | EchoStar7 119W TP 19 ConUS beam  |
| 19032    | HNNAV     | EchoStar7 119W TP 19 ConUS beam  |
| 19040    | ITVG(NA)  | EchoStar7 119W TP 17 ConUS beam  |
| 19048    | FTSYC     | EchoStar8 110W TP 06 ConUS beam  |
| 19049    | FTSYP     | EchoStar8 110W TP 06 ConUS beam  |
| 19050    | STCR(NA)  | EchoStar8 110W TP 10 ConUS beam  |
| 19051    | STCRV     | EchoStar8 110W TP 10 ConUS beam  |
| 19052    | ITVGV     | EchoStar7 119W TP 17 ConUS beam  |
| 19053    | TSN       | EchoStar8 110W TP 14 ConUS beam  |
| 19055    | ZP2IT     | EchoStar8 110W TP 06 ConUS beam  |
| 19058    | SHOWT(NA) | EchoStar8 110W TP 22 ConUS beam  |
| 19059    | SING(NA)  | EchoStar8 110W TP 22 ConUS beam  |
| 19060    | SINGV     | EchoStar8 110W TP 22 ConUS beam  |
| 19065    | CRICK(NA) | EchoStar8 110W TP 02 ConUS beam  |
| 19066    | DRACE(NA) | EchoStar7 119W TP 11 ConUS beam  |
| 19067    | CRIC2(NA) | EchoStar1 148W TP 09 ConUS beam  |
| 19067    | CRIC2(NA) | EchoStar3 61.5W TP 08 ConUS beam |
| 19070    | HORO      | EchoStar8 110W TP 16 ConUS beam  |
| 19073    | HSNAP(NA) | EchoStar7 119W TP 11 ConUS beam  |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 19075    | TWCAP(NA) | EchoStar7 119W TP 06 ConUS beam  |
| 19077    | DISCO(NA) | EchoStar8 110W TP 10 ConUS beam  |
| 19086    | LUDIV     | EchoStar8 110W TP 06 ConUS beam  |
| 19087    | LUDI2(NA) | EchoStar8 110W TP 09 ConUS beam  |
| 19090    | PLYJ(NA)  | EchoStar8 110W TP 06 ConUS beam  |
| 19091    | PLYJV     | EchoStar8 110W TP 06 ConUS beam  |
| 19092    | TRVA(NA)  | EchoStar8 110W TP 10 ConUS beam  |
| 19093    | TRVAV     | EchoStar8 110W TP 10 ConUS beam  |
| 19096    | DGAMS(NA) | EchoStar1 148W TP 23 ConUS beam  |
| 19097    | DGMSV     | EchoStar8 110W TP 02 ConUS beam  |
| 19098    | DGAMS(NA) | EchoStar8 110W TP 02 ConUS beam  |
| 19100    | SHARP(NA) | EchoStar8 110W TP 08 ConUS beam  |
| 19112    | DISAP(NA) | EchoStar1 148W TP 23 ConUS beam  |
| 19123    | DISAV     | EchoStar8 110W TP 02 ConUS beam  |
| 19124    | DSNY(NA)  | EchoStar8 110W TP 02 ConUS beam  |
| 19128    | ICM(NA)   | EchoStar1 148W TP 23 ConUS beam  |
| 19140    | TRIGC(NA) | EchoStar8 110W TP 06 ConUS beam  |
| 19140    | TRIGC(NA) | EchoStar7 119W TP 19 ConUS beam  |
| 19140    | TRIGC(NA) | EchoStar1 148W TP 19 ConUS beam  |
| 19140    | TRIGC(NA) | EchoStar3 61.5W TP 29 ConUS beam |
| 19141    | SBCVC     | EchoStar8 110W TP 06 ConUS beam  |
| 30200    | PPP       | AMC-15 105W TP 18 ConUS beam     |
| 30200    | PPP       | EchoStar8 110W TP 21 ConUS beam  |
| 30200    | PPP       | EchoStar7 119W TP 20 ConUS beam  |
| 30200    | PPP       | EchoStar9 121W TP 18 ConUS beam  |
| 30200    | PPP       | EchoStar5 129W TP 17 ConUS beam  |
| 30200    | PPP       | EchoStar1 148W TP 07 ConUS beam  |
| 30200    | PPP       | EchoStar3 61.5W TP 14 ConUS beam |
| 30201    | VMTRG(NA) | EchoStar8 110W TP 21 ConUS beam  |
| 30201    | VMTRG(NA) | EchoStar7 119W TP 19 ConUS beam  |
| 30201    | VMTRG(NA) | EchoStar1 148W TP 19 ConUS beam  |
| 30201    | VMTRG(NA) | EchoStar3 61.5W TP 29 ConUS beam |
| 31500    | KFUG      | EchoStar8 110W TP 01 ConUS beam  |
| 31500    | KFUG      | EchoStar7 119W TP 14 ConUS beam  |

| Channel# | Name      | Satellite/Beam                   |
|----------|-----------|----------------------------------|
| 31500    | KFUG      | EchoStar1 148W TP 23 ConUS beam  |
| 31500    | KFUG      | EchoStar3 61.5W TP 29 ConUS beam |
| 31510    | DLSV      | EchoStar8 110W TP 01 ConUS beam  |
| 31510    | DLSV      | EchoStar7 119W TP 14 ConUS beam  |
| 31510    | DLSV      | EchoStar1 148W TP 23 ConUS beam  |
| 31510    | DLSV      | EchoStar3 61.5W TP 29 ConUS beam |
| 32767    | WB200(NA) | EchoStar8 110W TP 21 ConUS beam  |
| 32767    | WB200(NA) | EchoStar7 119W TP 19 ConUS beam  |
| 32767    | WB200(NA) | EchoStar1 148W TP 19 ConUS beam  |
| 32767    | WB200(NA) | EchoStar3 61.5W TP 29 ConUS beam |
| 32768    | WBSTR(NA) | EchoStar8 110W TP 02 ConUS beam  |
| 32768    | WBSTR(NA) | EchoStar7 119W TP 19 ConUS beam  |
| 32768    | WBSTR(NA) | EchoStar1 148W TP 19 ConUS beam  |
| 32768    | WBSTR(NA) | EchoStar3 61.5W TP 29 ConUS beam |
| 36608    | GT150     | EchoStar7 119W TP 21 ConUS beam  |
| 36610    | ACTVT     | AMC-15 105W TP 18 ConUS beam     |
| 36610    | ACTVT     | EchoStar8 110W TP 02 ConUS beam  |
| 36610    | ACTVT     | AMC-16 118.7W TP 07 ConUS beam   |
| 36610    | ACTVT     | EchoStar7 119W TP 20 ConUS beam  |
| 36610    | ACTVT     | EchoStar9 121W TP 18 ConUS beam  |
| 36610    | ACTVT     | EchoStar5 129W TP 17 ConUS beam  |
| 36610    | ACTVT     | EchoStar1 148W TP 07 ConUS beam  |
| 36610    | ACTVT     | EchoStar3 61.5W TP 14 ConUS beam |
| 36700    | VOD(NA)   | EchoStar8 110W TP 21 ConUS beam  |
| 36849    | DNL1      | EchoStar8 110W TP 21 ConUS beam  |
| 36849    | DNL1      | EchoStar7 119W TP 19 ConUS beam  |
| 36850    | DNL8      | AMC-15 105W TP 07 ConUS beam     |
| 36850    | DNL8      | EchoStar8 110W TP 21 ConUS beam  |
| 36850    | DNL8      | EchoStar7 119W TP 19 ConUS beam  |
| 36850    | DNL8      | EchoStar9 121W TP 21 ConUS beam  |
| 36850    | DNL8      | EchoStar5 129W TP 17 ConUS beam  |
| 36850    | DNL8      | EchoStar1 148W TP 19 ConUS beam  |
| 36850    | DNL8      | EchoStar3 61.5W TP 29 ConUS beam |
| 36851    | DNL9      | EchoStar7 119W TP 19 ConUS beam  |

| Channel# | Name  | Satellite/Beam                   |
|----------|-------|----------------------------------|
| 36851    | DNL9  | EchoStar1 148W TP 19 ConUS beam  |
| 36851    | DNL9  | EchoStar3 61.5W TP 29 ConUS beam |
| 36852    | DNL11 | EchoStar7 119W TP 19 ConUS beam  |
| 36852    | DNL11 | EchoStar5 129W TP 08 ConUS beam  |
| 36852    | DNL11 | EchoStar1 148W TP 19 ConUS beam  |
| 36852    | DNL11 | Rainbow 1 61.5W TP 19 ConUS beam |
| 36854    | DNL10 | EchoStar7 119W TP 19 ConUS beam  |
| 36854    | DNL10 | EchoStar1 148W TP 19 ConUS beam  |
| 36854    | DNL10 | EchoStar3 61.5W TP 29 ConUS beam |
| 36855    | DNL7  | AMC-15 105W TP 07 ConUS beam     |
| 36855    | DNL7  | EchoStar8 110W TP 21 ConUS beam  |
| 36855    | DNL7  | EchoStar7 119W TP 19 ConUS beam  |
| 36855    | DNL7  | EchoStar9 121W TP 21 ConUS beam  |
| 36855    | DNL7  | EchoStar5 129W TP 17 ConUS beam  |
| 36855    | DNL7  | EchoStar1 148W TP 19 ConUS beam  |
| 36855    | DNL7  | EchoStar3 61.5W TP 29 ConUS beam |
| 36856    | DNL5  | AMC-15 105W TP 07 ConUS beam     |
| 36856    | DNL5  | EchoStar7 119W TP 19 ConUS beam  |
| 36856    | DNL5  | EchoStar9 121W TP 21 ConUS beam  |
| 36856    | DNL5  | EchoStar1 148W TP 19 ConUS beam  |
| 36856    | DNL5  | EchoStar3 61.5W TP 29 ConUS beam |
| 36857    | DNL6  | EchoStar8 110W TP 21 ConUS beam  |
| 36857    | DNL6  | EchoStar7 119W TP 19 ConUS beam  |
| 36857    | DNL6  | EchoStar1 148W TP 19 ConUS beam  |
| 36857    | DNL6  | EchoStar3 61.5W TP 29 ConUS beam |
| 36858    | DNL4  | AMC-15 105W TP 07 ConUS beam     |
| 36858    | DNL4  | EchoStar7 119W TP 19 ConUS beam  |
| 36858    | DNL4  | EchoStar9 121W TP 21 ConUS beam  |
| 36859    | DNL3  | AMC-15 105W TP 07 ConUS beam     |
| 36859    | DNL3  | EchoStar8 110W TP 21 ConUS beam  |
| 36859    | DNL3  | EchoStar7 119W TP 19 ConUS beam  |
| 36859    | DNL3  | EchoStar9 121W TP 21 ConUS beam  |
| 36859    | DNL3  | EchoStar5 129W TP 17 ConUS beam  |
| 36859    | DNL3  | EchoStar1 148W TP 19 ConUS beam  |

| Channel# | Name | Satellite/Beam                   |
|----------|------|----------------------------------|
| 36859    | DNL3 | EchoStar3 61.5W TP 29 ConUS beam |
| 36860    | SSD  | AMC-15 105W TP 07 ConUS beam     |
| 36860    | SSD  | EchoStar8 110W TP 21 ConUS beam  |
| 36860    | SSD  | EchoStar7 119W TP 19 ConUS beam  |
| 36860    | SSD  | EchoStar9 121W TP 21 ConUS beam  |
| 36860    | SSD  | EchoStar5 129W TP 17 ConUS beam  |
| 36860    | SSD  | EchoStar1 148W TP 19 ConUS beam  |
| 36860    | SSD  | EchoStar3 61.5W TP 29 ConUS beam |
| 36861    | EPG  | AMC-15 105W TP 07 ConUS beam     |
| 36861    | EPG  | EchoStar8 110W TP 21 ConUS beam  |
| 36861    | EPG  | AMC-16 118.7W TP 07 ConUS beam   |
| 36861    | EPG  | EchoStar7 119W TP 19 ConUS beam  |
| 36861    | EPG  | EchoStar9 121W TP 21 ConUS beam  |
| 36861    | EPG  | EchoStar5 129W TP 17 ConUS beam  |
| 36861    | EPG  | EchoStar1 148W TP 19 ConUS beam  |
| 36861    | EPG  | EchoStar3 61.5W TP 29 ConUS beam |
| 36862    | EEPG | EchoStar7 119W TP 18 ConUS beam  |
| 36863    | DNL  | AMC-15 105W TP 07 ConUS beam     |
| 36863    | DNL  | EchoStar8 110W TP 21 ConUS beam  |
| 36863    | DNL  | EchoStar7 119W TP 19 ConUS beam  |
| 36863    | DNL  | EchoStar9 121W TP 21 ConUS beam  |
| 36863    | DNL  | EchoStar5 129W TP 17 ConUS beam  |
| 36863    | DNL  | EchoStar1 148W TP 19 ConUS beam  |
| 36863    | DNL  | EchoStar3 61.5W TP 29 ConUS beam |