

## Frequenzen D-Star

Bei der IARU Konferenz 2008 in Cavtat wurden folgende Frequenzbereiche für D-Star vorgesehen. Bitte beachten Sie das auch noch analoger Funkbetrieb auf den Frequenzen durchgeführt wird. Beobachten Sie die Frequenz im Mode FM bevor Sie auf D-Star umstellen.

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## Frequenzen der Österreichischen Relais:

### QRG für Wien-AKH:

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Repeater: OE1XDS "B" Frequenz: 438,525 MHz - Shift -7,600 MHz

Repeater: OE1XDS "A" Frequenz: 1298,650 MHz - Shift 28,000 MHz

Standort: AKH Wien 1090

### QRG für Graz-Dobl:

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Repeater: OE6XDE (neues Rufzeichen) Frequenz: 438,900 MHz - Shift - 7,600 MHz Standort:  
Sender DOBL

### QRG für Linz - Breitenstein:

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Repeater: OE5XOL Frequenz: 438,525 - Shift - 7,600 MHz Standort: Breitenstein

## Direktfrequenzen:

### 2m

im Bereich von **145.225 bis 145.575** sind alle Frequenzen auch für den digitalen Betrieb (Sprache) vorgesehen.

**145.375** digital Anruf Frequenz

### 70cm

im Bereich **433.400 bis 433.575** sind alle Frequenzen auch für den digitalen Betrieb (Sprache) vorgesehen.

**433.450** digital Anruf Frequenz

### 23cm

im Bereich **1297.500 bis 1297.975** sind alle Frequenzen auch für den digitalen Betrieb (Sprache) vorgesehen.

**1297.725** digital Anruf Frequenz

1297.900-1297.975 Simplex FM Internet voice gateways

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## Frequenzen ausländischer Relais:

Dazu eine Vorbemerkung:

Es werden in dem D\_STAR System immer wieder Änderungen vorgenommen. Teilweise werden Frequenzen und/oder Rufzeichen geändert. Ausserdem ist nicht gesichert, dass die hier angeführten Repeater immer qrv sind. Man sollte sich in jedem Fall noch vor der Benützung informieren. Dies geschieht am besten, auch wenn diese Liste nicht immer am aktuellsten Stand ist auf dieser Internetseite: [D-STAR Repeaters](#)

Angeführt ist : Rufzeichen "A,B,C,D" Shift Standort in der Nähe von, ev. Bemerkung

### **D-STAR Relaisliste Portugal:**

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CQ0DAH B 438,45000 -7,6000 Teneriffa  
CQ0DCH B 438,57500 -7,6000 Chaves  
CQ0DFO B 438,57500 -7,6000 Albufeira  
CQ0DLR B 438,52500 -7,6000 Alcobaca  
CQ0DLX B 438,55000 -7,6000 Lisboa  
CQ0DSA B 438,47500 -7,6000 Lisboa Süd

### **D-STAR Relaisliste Deutschland:**

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Teilweise noch kein Gateway, daher nur lokal!

DB0AB B 439,45000 -0,6000 Arberg  
DB0ADB B 439,55000 -7,6000 Bamberg  
DB0ALG B 439,46250 -7,6000 Allgäu  
DB0BHN B 439,53750 -7,6000 Bremerhaven  
DB0BOS B 439,51250 -7,6000 Odenwald  
DB0BS B 439,45000 -7,6000 Bochum  
DB0DBN B 439,53125 -7,6000 Bonn  
DB0DDE B 439,53750 -7,6000 Essen  
DB0DDO C 145,72500 -0,6000 Dortmund  
DB0DDS B 439,48750 -7,6000 Dortmund  
DB0DF B 439,46250 -7,6000 Berlin  
DB0DJ A 1298,57500 -28,0000 Karlsruhe  
DB0DJ B 439,50000 -7,6000 Karlsruhe

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DB0DJ C 145,76250 -0,6000 Karlsruhe  
DB0DZ C 145,68750 -0,6000 Düsseldorf  
DB0FEU B 439,50000 -7,6000 Feuchtwangen  
DB0FWW B 439,48750 -7,6000 Braunschweig  
DB0FS B 439,56250 -7,6000 Hamburg Nord  
DB0FWS B 439,53750 -7,6000 Würzburg Nord  
DB0HAA B 439,58750 -7,6000 Hagen  
DB0HMB A 1298,72500 -28,0000 Hamburg  
DB0HMB B 439,51250 -7,6000 Hamburg  
DB0HOT B 439,50000 -7,6000 Lobsdorfer Höhe  
DB0HRF B 439,45000 -7,6000 Frankfurt  
DB0HRM B 439,52500 -7,6000 Kassel  
DB0HRR C 145,70000 -0,6000 Bad Hersfeld  
DB0HSK B 439,50625 -7,6000 Meschede  
DB0IKS B 439,46250 -7,6000 Saarbrücken  
DB0LBX B 439,55000 -7,6000 Stuttgart  
DB0LE B 439,57500 -7,6000 Leipzig  
DB0MFR B 439,47500 -7,6000 Hemmor  
DB0MYK B 439,56250 -7,6000 Koblenz  
DB0NG A 1298,57500 -28,0000 Marl  
DB0NG B 439,57500 -7,6000 Marl  
DB0NU B 439,50000 -7,6000 Altenstein  
DB0RDH A 1298,45000 -28,0000 Straubing  
DB0RDH B 439,47500 -7,6000 Straubing  
DB0RDH C 147,76250 -0,6000 Straubing  
DB0RKB B 439,58750 -7,6000 Rhön  
DB0SAT A 1298,75000 -28,0000 Hamburg Wilhelmsburg  
DB0SAT B 439,50000 -7,6000 Hamburg Wilhelmsburg  
DB0SAT C 145,77500 -0,6000 Hamburg Wilhelmsburg

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DB0SEN B 439,54375 -7,6000 Münster  
DB0SIF B 439,48750 -7,6000 Giesen  
DB0SN B 439,50000 -7,6000 Göttingen  
DB0SZS C 145,63750 -0,6000 Osnabrück  
DB0SZS B 439,50000 -7,6000 Osnabrück  
DB0TVM B 439,57500 -7,6000 München  
DB0VOX B 439,52500 -7,6000 Nürnberg  
DB0WIM B 439,56250 -7,6000 Landau/Pfalz  
DB0WK B 439,46250 -7,6000 Rhön  
DB0WZ A 1298,32500 -28,0000 Würzburg  
DB0WZ B 439,47500 -7,6000 Würzburg  
DB0WZ C 145,72500 -0,6000 Würzburg  
DB0WZB B 439,48750 -7,6000 Veitshöchheim  
DB0XPO B 439,55000 -7,6000 Hannover  
DB0ZB B 439,56250 -7,6000 Bayreuth  
DB0ZO C 145,75000 -0,6000 Bad Iburg  
DB0ZO B 439,56250 -7,6000 Bad Iburg  
DF0HHH B 439,57500 -7,6000 Hamburg  
DF0HMR B 439,47500 -7,6000 Duisburg  
DF0HMR C 145,60000 -0,6000 Duisburg  
DM0FI B 439,45000 -7,6000 Erzgebirge  
DM0HMB A 1298,70000 -28,0000 Hamburg  
DM0HMB B 439,45000 -7,6000 Hamburg  
DM0HMB C 145,78750 -0,6000 Hamburg  
DM0MW B 439,55000 -7,6000 Dresden  
DM0XX B 439,51250 -7,6000 Bremen

### **D-STAR Relaisliste Spanien:**

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EA3RCC B 438,47500 -7,6000 Barcelona  
EA5A B 438,20000 -7,6000 Valencia

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**D-STAR Relaisliste Frankreich:**

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F1ZPL B 430,26250 9,4000 Paris

F1ZPL C 145,51250 -0,6000 Paris

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**D-STAR Relaisliste England:**

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GB7AD B 439,91250 -9,0000 Bristol

GB7AI B 430,82500 7,6000 London Nordwest

GB7AU B 439,70000 -9,0000 London Nordwest

GB7CD B 439,70000 -9,0000 Bristol West

GB7DB B 439,66250 -9,0000 London Nord

GB7DE B 439,60000 -9,0000 Edinburg Nord

GB7DE C 145,63750 -0,6000 Edinburg Nord

GB7DG B 439,70000 -9,0000 Glasgow

GB7DG C 145,77500 -0,6000 Glasgow

GB7DS A 1290,15000 -20,0000 Heme Bay

GB7DV B 439,61250 -9,0000 Warnigton

GB7DW C 145,61250 -0,6000 Glasgow Süd

GB7DX B 439,70000 -9,0000 Asford

GB7FK B 439,73750 -9,0000 Dover

GB7FK C 145,78750 -0,6000 Dover

GB7GD C 145,68750 -0,6000 Aberdeen

GB7HD B 439,45000 -9,0000 Leeds

GB7IC A 1290,65000 -20,0000 Canterbury

GB7IC B 439,45000 -9,0000 Canterbury

GB7JF B 439,63750 -9,0000 Northhampton

GB7JH B 439,71250 -9,0000 Worthing

GB7NM B 439,46250 -9,0000 Manchester

GB7PI B 439,91250 -9,0000 Cambridge

GB7SF B 439,73750 -9,0000 Sheffield

GB7SF C 145,73750 -0,6000 Sheffield  
GB7SS B 439,73750 -9,0000 Southend  
GB7SY B 439,70000 -9,0000 Birmingham  
GB7WC B 439,78750 -9,0000 Liverpool  
GB7WF B 439,48750 -9,0000 Birmingham Südwest  
GB7WP B 439,91250 -9,0000 Liverpool Süd  
GB7WT B 439,60000 -9,0000 Liverpool Central  
GB7YD B 439,60000 -9,0000 Leeds  
GB7YD C 145,67500 -0,6000 Leeds  
GB7ZI B 439,68750 -9,0000 Birmingham Nord

### **D-STAR Relaisliste Schweiz:**

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HB9AR B 439,32500 -7,6000 Genf  
HB9AW C 145,78750 -0,6000 Zürich West  
HB9BO B 439,52500 -7,6000 Bern  
HB9BO C 145,61250 -0,6000 Bern  
HB9F B 438,32500 -7,6000 Bern City  
HB9HD C 145,58750 -0,6000 Zürich Ost (Winterthur)  
HB9IAC C 145,76250 -0,6000 Genf Nord

### **D-STAR Relaisliste Italien:**

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IQ2GM A 1297,27500 -6,0000 Milano Nordwest  
IQ2GM B 430,20000 1,6000 Milano Nordwest  
IQ4GS B 431,52500 1,6000 La Spezia  
IQ4GS C 144,86250 0,6000 La Spezia  
IR0UAC A 1297,47500 -55,0000 Rom  
IR0UAC B 430,02500 5,0000 Rom  
IR1CJ C 144,98750 1,0000 Turin  
IR1UDI B 430,02500 1,6000 Casale  
IR1UDI C 145,68750 -0,6000 Casale  
IR2UDY B 431,50000 1,6000 Milano

IR3CZ B 431,52500 1,6000 Veneto  
IR3DA A 1297,00000 -30,0000 Venecia  
IR3DA B 430,01250 5,0000 Venecia  
IR3DA C 145,80000 -0,6000 Venecia  
IR3DB B 430,45000 5,0000 Verona  
IR3UEF B 431,47500 1,6000 Padua  
IR3UEF B 145,97500 -1,1000 Padua  
IR4UBL B 430,56250 5,0000 Verona Süd  
IR5UH B 431,51200 1,6000 Firenze  
IR6UBM B 430,11250 1,6000 Vasto  
IR7AZ C 145,97500 -1,2500 Bari Nord  
IR7UBA B 430,30000 5,0000 Bari Süd  
IR8AW B 430,42500 5,0000 Napoli  
IR8BT B 430,45000 5,0000 Salerno  
IR8CA B 430,47500 5,0000 Napoli Süd  
IR8CA C 145,66250 -0,6000 Napoli Süd  
IR8UAF B 430,50000 5,0000 Napoli Nord  
IR9G C 145,66250 -0,6000 Palermo

### **D-STAR Relaisliste Norwegen:**

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LD3DV B 434,52500 -2,0000 Oslo

### **D-STAR Relaisliste Argentinien:**

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LU3AOC A 1282,00000 -12,0000 Buenos Aires  
LU3AOC B 434,95000 5,0000 Buenos Aires  
LU3AOC C 147,34500 -0,6000 Buenos Aires  
LU5FB C 147,03000 0,6000 Rosario

### **D-STAR Relaisliste Belgien:**

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ON0CPS B 439,56250 -7,6000 Charleroi

ON0OS B 439,50000 -7,6000 Ostende

ON0OS C 145,71250 -0,6000 Ostende

ON0WV B 439,56250 -7,6000 Bruegge

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### **D-STAR Relaisliste Dänemark:**

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OZ2REA B 434,93750 -2,0000 Kopenhagen

OZ2REA C 145,78750 -0,6000 Kopenhagen

OZ2REB C 145,76875 -0,6000 Odense

OZ4RED B 434,91250 -2,0000 Holbeak

OZ4RED C 145,63750 -0,6000 Holbeak

OZ9RET B 434,98750 -2,0000 Visby

OZ9RET C 145,66250 -0,6000 Visby

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### **D-STAR Relaisliste Holland:**

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PI1DSA B 439,82500 -9,4000 Utrecht

PI1HWB B 430,92500 7,6000 Rotterdam

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### **D-STAR Relaisliste Brasilien:**

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PY2KPP C 145,41000 -0,6000 Sao Paulo

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### **D-STAR Relaisliste Slowenien:**

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S55DGO B 438,50000 -7,6000 Gorica

S55DLJ B 438,20000 -7,6000 Lublijana

S55DMX B 438,35000 -7,6000 Maribor

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### **D-STAR Relaisliste Griechenland:**

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SV3G B 439,40000 -7,6000 unbekannt

SZ1SV A 1270,02500 28,0000 Athen

SZ1SV B 439,42500 -7,6000 Athen

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### **D-STAR Relaisliste Canada:**

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Canada VA2RKA B 446,15000 5,0000 Montreal

VA2RKB C 146,89500 -0,6000 Montreal

VA3NAG A 1282,50000 -12,0000 Buffalo

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VA3ODG A 1282,00000 -12,0000 Ottawa  
VA3ODG B 444,85000 5,0000 Ottawa  
VA3ODG C 145,53000 -0,6000 Ottawa  
VA7ICM A 1247,00000 12,0000 Vancouver  
VA7ICM B 442,00000 5,0000 Vancouver  
VA7ICM C 145,04000 0,6000 Vancouver  
VE2LKL B 449,17500 -5,0000 Quebec  
VE2LKL C 147,27000 -0,6000 Quebec  
VE2RIO A 1283,00000 -12,0000 Montreal  
VE2RIO B 449,92500 -5,0000 Montreal  
VE2RIO C 144,95000 -0,6000 Montreal  
VE2RMF A 1283,00000 -20,0000 Quebec  
VE2RMF B 449,92500 -5,0000 Quebec  
VE2RMF C 144,95000 -0,6000 Quebec  
VE2RQF C 145,33000 -0,6000 Sherbrooke  
VE2RTO B 442,00000 5,0000 Magog  
VE2RVR B 444,20000 5,0000 Montreal  
VE2TXD B 441,17000 5,0000 Victonville  
VE2TXD C 144,81000 0,6000 Victonville  
VE3RPT B 443,22500 5,0000 Toronto  
VE3RXR C 145,31000 -0,6000 Sudbury  
VE3TTT B 442,30000 5,0000 Hamilton  
VE3WIK B 443,63750 5,0000 Hamilton  
VE3WIK C 146,71500 -0,6000 Hamilton  
VE3YYZ A 1287,50000 -12,0000 Toronto  
VE3YYZ B 442,70000 5,0000 Toronto  
VE3YYZ C 144,93000 0,6000 Toronto  
VE6GHZ A 1287,97500 -12,0000 Calgary  
VE6GHZ B 444,95000 5,0000 Calgary

VE6GHZ C 147,09000 0,6000 Calgary  
VE6IPG A 1275,95000 12,0000 Calgary  
VE6IPG B 444,96250 5,0000 Calgary  
VE6IPG C 147,28500 0,6000 Calgary  
VE6KM A 1295,12950 ??? Edmonton  
VE6KM B 444,90000 5,0000 Edmonton  
VE6KM C 145,47000 -0,6000 Edmonton  
VE6WRN A 1287,50000 -20,0000 Calgary  
VE6WRN B 444,92500 5,0000 Calgary  
VE6WRN C 146,80500 -0,6000 Calgary  
VE7RAG A 1291,94000 -20,0000 Vancouver  
VE7RAG B 443,40000 5,0000 Vancouver  
VE7RAG C 147,02000 0,6000 Vancouver  
VE7VIC A 1291,50000 -20,0000 Victoria  
VE7VIC B 442,00000 5,0000 Victoria  
VE7VIC C 145,08000 0,6000 Victoria  
VO1ILP B 443,40000 5,0000 Neufundland

## **D-STAR Relaisliste Australien:**

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Australien VK2RDS A 1273,85000 20,0000 Sydney Süd  
VK2RDS B 438,05000 -5,4000 Sydney Süd  
VK2RDS C 146,76250 -0,6000 Sydney Süd  
VK2RWN A 1273,90000 20,0000 Sydney Nord  
VK2RWN B 438,40000 -5,4000 Sydney Nord  
VK2RWN C 146,96250 -0,6000 Sydney Nord  
VK3RWW B 438,15000 -5,4000 Melbourne Nordwest  
VK4RDS C 146,73750 -0,6000 Brisbane Nord  
VK4RWN A 1273,10000 20,0000 Brisbane Süd

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VK4RWN B 438,22500 -5,4000 Brisbane Süd

VK4RWN C 146,83750 -0,6000 Brisbane Süd

VK5REX B 438,22500 -5,4000 Port Lincoln

VK5RWN A 1273,70000 20,0000 Adelaide

VK5RWN B 438,40000 -5,4000 Adelaide

VK5RWN C 146,93750 -0,6000 Adelaide

VK6RWN A 1273,90000 20,0000 Perth

VK6RWN B 438,30000 -5,4000 Perth

VK6RWN C 146,83750 -0,6000 Perth

VK8RAD A 1273,40000 20,0000 Darwin

VK8RAD B 438,75000 -5,0000 Darwin

VK8RAD C 146,70000 -0,6000 Darwin

## **D-STAR Relaisliste USA:**

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AA1HD B 442,1500 5,0000 Hartford Connecticut AA1HD C 145,2600 -0,6000 Hartford Connecticut  
AK4EG A 1284,4000 -20,0000 Greensboro Carolina AK4EG B 444,8875 5,0000 Greensboro  
Carolina AK4EG C 145,3200 -0,6000 Greensboro Carolina K0HAM A 1287,0000 -12,0000 Kansas  
City Missouri K0HAM B 442,1250 5,0000 Kansas City Missouri K0HAM C 145,1200 -0,6000 Kansas  
City Missouri K0MDG A 1285,0000 -12,0000 St. Louis Missouri K0MDG B 442,5750 5,0000 St.  
Louis Missouri K0MDG C 147,0375 0,6000 St. Louis Missouri K1HRO A 1293,1239 -20,0000  
Manchester New Hampshire K1HRO B 444,3500 5,0000 Manchester New Hampshire K1HRO C  
145,3300 -0,6000 Manchester New Hampshire K1XC A 1285,0000 -12,0000 Orlando Florida K1XC  
B 443,2750 5,0000 Orlando Florida K1XC C 146,8200 -0,6000 Orlando Florida K2CC A 1284,0000  
-12,0000 Canton Vermont K2CC B 433,3500 5,0000 Canton Vermont K2DIG A 1293,0000  
-20,0000 Manhattan New York K2DIG B 445,2750 -5,0000 Manhattan New York K3PDR B  
447,6250 -5,0000 Philadelphia New Jersey K4DSO A 1293,4000 -12,0000 Birmingham Alabama  
K4DSO B 443,2000 5,0000 Birmingham Alabama K4DSO C 145,4100 -0,6000 Birmingham  
Alabama K4WAK A 1293,0000 -20,0000 Tallahassee Florida K4WAK B 443,4500 5,0000  
Tallahassee Florida K4WAK C 146,8350 -0,6000 Tallahassee Florida K5CTX A 1292,1000 -20,0000  
Austin Texas K5CTX B 440,5250 5,0000 Austin Texas K5CTX C 147,3400 0,6000 Austin Texas  
K5MIJ B 440,6000 5,0000 Dallas Texas K5PLD C 146,4900 1,0000 Lhasa Tibet K5RKN B 444,8250  
5,0000 Jackson Mississippi K5RKN C 145,1700 -0,6000 Jackson Mississippi K5TIT A 1293,0000  
-20,0000 Dallas Texas K5TIT B 442,0000 5,0000 Dallas Texas K5TIT C 147,3600 0,6000 Dallas  
Texas K5ZOE B 443,3250 5,0000 Columbia South Carolina K6ACS B 442,1125 5,0000 Santa Rosa  
California K6ACS C 145,0400 -0,4000 Santa Rosa California K6CHO A 1286,5250 -12,0000 Chico  
California K6CHO C 144,9200 -0,4000 Chico California K6LRG A 1286,6250 -12,0000 San Jose  
California K6LRG B 444,6875 5,0000 San Jose California K6MDD A 1284,2000 -12,0000 San  
Francisco California K6MDD B 444,1375 5,0000 San Francisco California K6MDD C 146,5850  
1,0000 San Francisco California K6PIT C 147,2850 0,6000 Pittsburgh California K6SOA A 1282,6000  
-12,0000 Los Angeles California K6SOA B 445,6600 5,0000 Los Angeles California K6SOA C

146,1150 0,6000 Los Angeles California K6VIS C 145,5500 -0,6000 Visalia California K6VO A  
1283,0000 -12,0000 Irvine California K7WH A 1290,0000 -20,0000 Herbin China K7WH B  
443,0000 5,0000 Herbin China K7WH C 145,2900 -0,6000 Herbin China K7RST A 1284,2500 ???  
Tuscon Arizona K7RST B 445,9000 ??? Tuscon Arizona K7RST C 145,1150 ??? Tuscon Arizona  
KI8BIG B 444,0000 5,0000 Cincinnati Ohio KI8BIG C 145,3500 -0,6000 Cincinnati Ohio K8ETN C  
145,2000 ??? Lansing Michigan K8LCD A 1294,4800 -20,0000 Detroit West Michigan K8LCD B  
444,0625 5,0000 Detroit West Michigan K8LCD C 147,2100 0,6000 Detroit West Michigan  
KC2TGB B 444,6500 5,0000 Philadelphia SO New Jersey KC9OKW B 443,2500 5,0000 Chicago  
West Illinois KD0CGR C 145,1750 -6,0000 Omaha Nebraska KD2STR B 443,6875 5,0000 Buffalo  
New York KD7REX B 440,5500 5,0000 Portland Oregon KD7REX C 144,5100 3,0000 Portland  
Oregon KD8DRG B 442,5750 5,0000 Akron Ohio KD8DRG C 146,9550 -0,6000 Akron Ohio KE5RCS  
A 1295,1295 -20,0000 Austin Texas KE5RCS B 440,5750 5,0000 Austin Texas KE5RCS C 145,1300  
-0,6000 Austin Texas KE7JFH A 1295,6500 -12,0000 Phoenix West Arizona KE7JFH B 445,9750  
-5,0000 Phoenix West Arizona KE7JFH C 145,1250 -0,6000 Phoenix West Arizona KE7MVI B  
443,7750 5,0000 Medford Oregon KE7WTB B 445,6600 5,0000 Seattle Washington KE7WTB C  
146,1150 0,6000 Seattle Washington KE7WTC A 1282,6500 -12,0000 Seattle Washington  
KE7WTC B 447,0000 -5,0000 Seattle Washington KE7WTC C 146,6050 -0,6000 Seattle  
Washington KF6BQK B 449,0800 -5,0000 Long Beach California KI4PPF A 1284,0000 -12,0000  
Huntsville Alabama KI4PPF B 443,3750 5,0000 Huntsville Alabama KI4PPF C 145,4300 -6,0000  
Huntsville Alabama KI4SAZ A 1285,0000 -20,0000 Mobile Bay Mississippi KI4SAZ B 444,3000  
5,0000 Mobile Bay Mississippi KI4SAZ C 145,3100 -0,6000 Mobile Bay Mississippi KI4SBA A  
1284,4000 -12,0000 Atlanta Georgia KI4SBA B 444,3500 5,0000 Atlanta Georgia KI4SBA C  
145,2000 -0,6000 Atlanta Georgia KI4SBB A 1282,5000 -12,0000 Birmingham Alabama KI4SBB B  
443,9750 5,0000 Birmingham Alabama KI4SBB C 145,4800 0,6000 Birmingham Alabama KI4TMJ  
A 1284,0000 -12,0000 Gulfport Mississippi KI4TMJ B 444,4750 5,0000 Gulfport Mississippi KI4TMJ C  
145,1700 -0,6000 Gulfport Mississippi KI4WXS A 1284,0000 -12,0000 Gstonia Carolina KI4WXS B  
443,8625 5,0000 Gstonia Carolina KI4WXS C 145,1400 -0,6000 Gstonia Carolina KI6JKA B  
447,2000 -5,0000 Los Angeles California KI6JUL A 1286,5250 -12,0000 Los Angeles California  
KI6JUL C 145,6800 -0,6000 San Jose California KI6KQU B 447,8400 -5,0000 San Diego California  
KI6MGN B 445,8600 -5,0000 San Diego N California KI6MGN C 145,5850 -0,6000 San Diego N  
California KJ4ACN A 1293,5500 -20,0000 Tampa Florida KJ4ACN B 444,7750 5,0000 Tampa Florida  
KJ4ACN C 147,3750 0,6000 Tampa Florida KJ4ARB A 1293,0000 -20,0000 Tampa Florida KJ4ARB B  
444,6750 5,0000 Tampa Florida KJ4ARB C 147,0100 0,6000 Tampa Florida KJ4BDF B 440,7250  
??? Atlanta Gorgia KJ4BWK B 443,2000 5,0000 Columbia Carolina KJ4BWK C 145,4000 -0,6000  
Columbia Carolina KJ4BYI B 442,7625 5,0000 Tampa Florida KJ4FCS B 442,7750 5,0000 Columbia  
Carolina KJ4GGV A 1282,7000 -12,0000 Savannah Gorgia KJ4GGV B 440,7000 5,0000 Savannah  
Gorgia KJ4GGV C 145,3000 -0,6000 Savannah Gorgia KL7FF C 147,3800 0,6000 Ketchikan Alaska  
KR7ST A 1284,7500 -12,0000 Tuscon Arizona KR7ST B 445,9500 -5,0000 Tuscon Arizona KR7ST C  
147,4100 -1,0000 Tuscon Arizona KT7APR B 443,6250 5,0000 Lima Ohio KX4DOR B 442,8375  
5,0000 Charleston South Carolina KX4DOR C 145,2800 -0,6000 Charleston South Carolina N1HIT  
B 448,8750 -5,0000 Manchester New Hampsire N1HIT C 145,4000 -0,6000 Manchester New  
Hampsire N4USI B 442,4125 5,0000 Washigton W Maryland N4USI C 145,4500 -0,6000 Washigton  
W Maryland N7ARR B 446,8000 -5,0000 Las Vegas Nevada N7CI B 445,8500 -5,0000 Phoenix Ost  
Arizona N7IH A 1294,0000 -20,0000 Seattle Washigton N7IH B 443,5750 5,0000 Seattle  
Washigton N7IH C 145,2900 0,6000 Seattle Washigton NE4SC B 442,7875 5,0000 Conway South  
Carolina NE4SC C 144,9800 2,5000 Conway South Carolina NI4CE B 444,4250 5,0000 Tampa SO  
Florida NJ2DG A 1284,0000 -12,0000 New York SW New Jersey NJ2DG B 441,6500 5,0000 New  
York SW New Jersey NJ2DG C 145,1400 -0,6000 New York SW New Jersey NJ2DS A 1255,3000

12,0000 Philadelphia S New Jersey NJ2DS B 447,4750 -5,0000 Philadelphia S New Jersey NJ2DS C 146,7750 -0,6000 Philadelphia S New Jersey NJ2MC B 446,6250 ??? New York W New Jersey NJ2MC C 146,7150 ??? New York W New Jersey NM5WR B 442,4250 5,0000 Santa FE New Mexico NS9RC A 1292,2000 -20,0000 Cikago Iowa NS9RC B 442,0938 5,0000 Cikago Iowa NT5RN A 1293,5000 -20,0000 Dallas Texas NT5RN B 443,0250 5,0000 Dallas Texas NT5RN C 145,1500 -0,6000 Dallas Texas NV4FM A 1282,8000 -12,0000 Washigton W Maryland NV4FM B 448,0350 -5,0000 Washigton W Maryland NV4FM C 145,3400 -6,0000 Washigton W Maryland W0CDS A 1283,9625 -12,0000 Denver Colorado W0CDS B 446,9625 -5,0000 Denver Colorado W0CDS C 145,2500 -0,6000 Denver Colorado W0CW A 1285,0500 -12,0000 Kansas City Kansas W0CW B 443,4000 5,0000 Kansas City Kansas W0MAO B 442,2500 5,0000 Lincoln Nebraska W0MAO C 145,2500 -0,6000 Lincoln Nebraska W0OMD B 442,2250 5,0000 Springfield Missouri W0OMD C 146,7750 -0,6000 Springfield Missouri W0SCI B 443,1750 5,0000 Des Moines Iowa W0SCI C 145,3500 -0,6000 Des Moines Iowa W1IXU B 448,3750 ??? Bristol Connecticut W1IXU C 147,4150 ??? Bristol Connecticut W1KK A 1282,5000 -12,0000 Chicopee Massachusetts W1KK B 449,1750 -5,0000 Chicopee Massachusetts W1KK C 145,1500 -0,6000 Chicopee Massachusetts W2DGL A 1293,0500 -20,0000 New York W New Jersey W2DGL C 146,4450 1,0000 New York W New Jersey W3EOC A 1255,5000 12,0000 Philadelphia West Pensilvenia W3EOC B 445,0750 -5,0000 Philadelphia West Pensilvenia W3EOC C 146,4900 1,0000 Philadelphia West Pensilvenia W3EXW B 444,3500 5,0000 Pittsburg Pensilvenia W3OI B 445,0250 -5,0000 Pittsburg Pensilvenia W3OI C 147,1650 0,6000 Allentown Pensilvenia W4AES A 1291,3000 -20,0000 Orlando Florida W4AES B 442,0250 5,0000 Orlando Florida W4AES C 145,2900 -6,0000 Orlando Florida W4AP A 1284,0000 -12,0000 Montgomery Alabama W4AP B 443,9750 5,0000 Montgomery Alabama W4AP C 146,9200 -0,6000 Montgomery Alabama W4BBR A 1284,6000 -12,0000 Virginia Beach Virginia W4BBR B 441,9000 5,0000 Virginia Beach Virginia W4BBR C 145,3500 -0,6000 Virginia Beach Virginia W4BUG A 1291,6000 -20,0000 Fort Lauderdale Florida W4BUG B 442,2000 5,0000 Fort Lauderdale Florida W4BUG C 145,3400 -0,6000 Fort Lauderdale Florida W4DOC A 1282,6000 -12,0000 Atlanta Alabama W4DOC B 440,6000 ??? Atlanta Alabama W4DOC C 145,3500 -0,6000 Atlanta Alabama W4DSI B 444,1250 5,0000 Lexigton Kentuky W4DSI C 146,9400 -0,6000 Lexigton Kentuky W4HFH A 1284,6000 -12,0000 Washigton W Maryland W4HFH B 442,0600 5,0000 Washigton W Maryland W4HFH C 145,3800 -0,6000 Washigton W Maryland W4HRS A 1284,2250 -12,5000 Charleston South Carolina W4HRS B 444,1125 5,0000 Charleston South Carolina W4HRS C 145,1600 -0,6000 Charleston South Carolina W4KCQ A 1284,4000 -20,0000 Tuscalosa Alabama W4KCQ B 442,0750 5,0000 Tuscalosa Alabama W4KCQ C 146,6050 -0,6000 Tuscalosa Alabama W4PL A 1291,0000 -20,0000 Chattanooga Tennessee W4PL B 443,1500 5,0000 Chattanooga Tennessee W4PL C 145,2900 -0,6000 Chattanooga Tennessee W4RNT B 444,8125 5,0000 Tampa Florida W4TTR B 442,9000 5,0000 Birmingham Ost Alabama W4TTR C 145,3500 -0,6000 Birmingham Ost Alabama W4WBC A 1283,5000 -12,0000 Huntsvilla Alabama W4WBC B 443,4250 5,0000 Huntsvilla Alabama W4WBC C 145,3600 -0,6000 Huntsvilla Alabama W5GAD A 1285,0000 -12,0000 New Orleans Lousiana W5GAD B 444,9250 5,0000 New Orleans Lousiana W5GAD C 146,9250 -0,6000 New Orleans Lousiana W5HAT B 440,6250 5,0000 Waco Texas W5HAT C 147,2400 0,6000 Waco Texas W5HDR A 1293,0000 -20,0000 Houston Texas W5HDR B 440,6000 5,0000 Houston Texas W5HDR C 146,4700 1,0000 Houston Texas W5HDT A 1293,2000 -20,0000 Houston Texas W5LM B 440,6750 5,0000 Austin Texas W5NGU A 1293,4000 -20,0000 Dallas Texas W5NGU B 442,9250 5,0000 Dallas Texas W5NGU C 147,4500 -1,0000 Dallas Texas W5NRU B 441,8125 5,0000 Laurel Mississippi W5OKT B 444,2750 5,0000 Woodward Kansas W5SHV A 1293,0000 -20,0000 Shreveport Texas W5SHV B 442,0000 5,0000 Shreveport Texas W5SHV C 147,3000 0,6000 Shreveport Texas W5ZDN C 146,9800 -0,6000 Waco Texas W6CO B 440,0500 5,0000 Napa California W6DHS A 1284,5000 -12,0000 Sacramento Ost California

W6DHS B 440,6000 5,0000 Sacramento Ost California W6DHS C 144,9600 -0,4000 Sacramento Ost California W6HRO A 1282,5500 -12,0000 Los Angeles California W6HRO B 447,8000 -5,0000 Los Angeles California W6HRO C 145,6150 -0,6000 Los Angeles California W6YYY B 440,0375 5,0000 Oakland California W7AES A 1282,3900 ??? Las Vegas Nevada W7AES B 449,5750 -5,0000 Las Vegas Nevada W7AES C 145,1450 -0,6000 Las Vegas Nevada W7DIN B 445,9750 -5,0000 Yuma Arizona W7GC C 147,3900 0,6000 Portland West Oregon W7MOT A 1283,9000 -12,0000 Phoenix Arizona W7MOT B 440,8125 5,0000 Phoenix Arizona W7MOT C 145,1350 -0,6000 Phoenix Arizona W7URG B 441,9500 5,0000 Hermiston Oregon W7URG C 147,3900 0,6000 Hermiston Oregon W7VOI B 444,3500 5,0000 Nmapa Montana W8BI B 443,7500 5,0000 Dayton Ohio W8BI C 147,1100 0,6000 Dayton Ohio W8DIG A 1285,0000 -12,0000 Columbus Ohio W8DIG B 442,6500 5,0000 Columbus Ohio W8DIG C 145,3900 -0,6000 Columbus Ohio W8LIV B 444,0375 5,0000 Detroit West Michigan W8LIV C 145,3200 -0,6000 Detroit West Michigan W8RNL A 1293,0000 -20,0000 Cincinnati Indiana W8RNL B 442,6250 5,0000 Cincinnati Indiana W8RNL C 145,1600 -0,6000 Cincinnati Indiana W8SHI B 444,3000 5,0000 Flint Michigan W8SHI C 145,2400 -0,6000 Flint Michigan W9ARP B 444,3000 5,0000 Indianapolis N Indiana W9ARP C 146,7300 -0,6000 Indianapolis N Indiana W9BCC A 1282,1000 -12,0000 Wausau Wisconsin W9ICE B 444,1250 5,0000 Indianapolis Indiana W9ICE C 147,3900 0,6000 Indianapolis Indiana W9PIA A 1292,4000 -20,0000 Dallas Texas W9PIA B 443,4688 5,0000 Dallas Texas W9PIA C 145,1050 -0,6000 Dallas Texas W9YR B 443,4813 5,0000 Champaign Illinois WA5UNH B 440,7000 5,0000 San Antonio Texas Wa6IRC A 1282,6500 -12,0000 Los Angeles California Wa6IRC B 447,0400 -5,0000 Los Angeles California Wa6IRC C 145,6050 -0,6000 Los Angeles California WA7FW B 443,8500 5,0000 Seattle Washington WA7FW C 147,0400 0,6000 Seattle Washington WB4GNA A 1285,0000 -12,0000 Atlanta W Alabama WB4GNA B 442,4250 5,0000 Atlanta W Alabama WB4GNA C 145,3000 -0,6000 Atlanta W Alabama WD4STR A 1282,5500 -12,0000 Atlanta Ost Alabama WD4STR B 440,5500 5,0000 Atlanta Ost Alabama WD4STR C 146,9700 -0,6000 Atlanta Ost Alabama WD5AAI A 1293,0000 -20,0000 Oklahoma City Oklahoma WD5AAI B 442,6250 5,0000 Oklahoma City Oklahoma WD5AAI C 147,3450 0,6000 Oklahoma City Oklahoma WD5STR B 440,6000 5,0000 San Antonio Texas WD5STR C 146,4900 1,0000 San Antonio Texas WD8MKG B 444,0125 5,0000 Muskegon Michigan WD8MKG C 145,3600 -0,6000 Muskegon Michigan WH6DIG B 444,9250 5,0000 Honolulu Hawaii WH6DIG C 147,1800 0,6000 Honolulu Hawaii WR9AND B 441,8000 5,0000 Indianapolis Indiana WS4VA A 1282,2000 -20,0000 Washington S Maryland WS4VA B 447,3750 -5,0000 Washington S Maryland WS4VA C 145,3200 -0,6000 Washington S Maryland WU5PIG B 442,6000 5,0000 Fort Smith Arkansas WX4GPB A 1282,7000 -12,0000 Atlanta Georgia WX4GPB B 440,7000 5,0000 Atlanta Georgia WX4GPB C 144,9600 2,5000 Atlanta Georgia WX8GRR B 442,5500 5,0000 Grand Rapids Michigan WX8GRR C 147,2900 0,6000 Grand Rapids Michigan