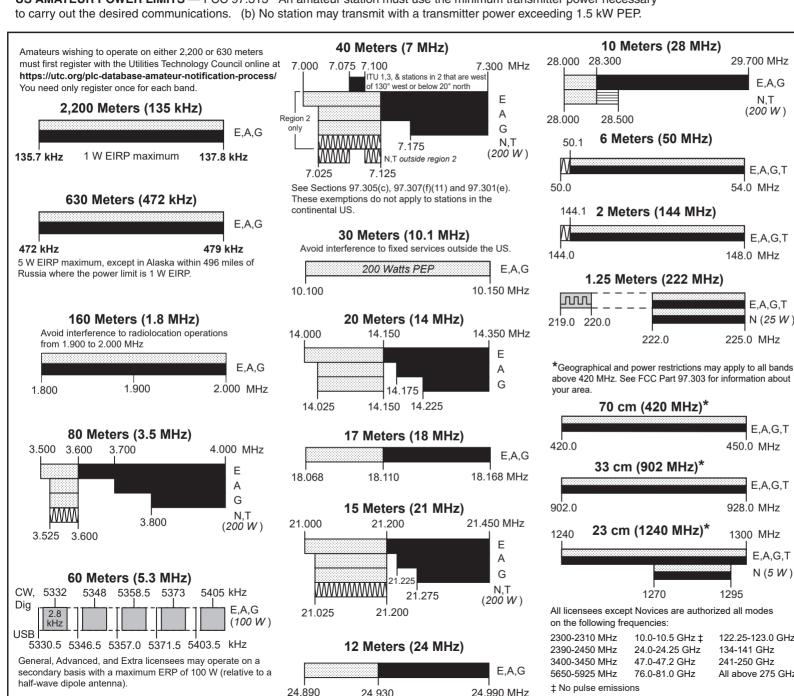
US Amateur Radio Bands

US AMATEUR POWER LIMITS — FCC 97.313 An amateur station must use the minimum transmitter power necessary to carry out the desired communications. (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.





Note:

29 700 MHz

E.A.G

N.T

(200 W)

E.A.G.T

E.A.G.T

E.A.G.T

N (25 W)

E.A.G.T

E.A.G.T

E,A,G,T

N (5 W)

450.0 MHz

928.0 MHz

1300 MHz

122.25-123.0 GHz

All above 275 GHz

134-141 GHz

241-250 GHz

1295

54.0 MHz

148.0 MHz

225.0 MHz

CW operation is permitted throughout all amateur bands

MCW is authorized above 50.1 MHz. except for 144.0-144.1 and 219-220 MHz

Test transmissions are authorized above 51 MHz, except for 219-220 MHz

= RTTY and data

= phone and image

= CW only

= SSB phone

= USB phone, CW, RTTY, and data.

= Fixed digital message forwarding systems only

E = Amateur Extra

A = Advanced

G = General

T = Technician

N = Novice

See www.arrl.org/band-plan for detailed band plans.

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Exams: 860-594-0300 email: vec@arrl.org

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Considerate Frequency Usage

1.800-2.000	CW	14.233	D-SSTV
1.800-1.810	Digital Modes	14.236	Digital Voice
1.810	CW QRP calling frequency	14.285	QRP SSB calling frequency
1.843-2.000	SSB, SSTV and other wideband modes	14.286	AM calling frequency
1.910	SSB QRP	18.100–18.105	RTTY/Data
1.995–2.000	Experimental	18.105–18.110	Automatically controlled data stations
1.999–2.000	Beacons	18.110	IBP/NCDXF beacons
3.500–3.510	CW DX window	18.162.5	Digital Voice
3.560	QRP CW calling frequency	21.060	QRP CW calling frequency
3.570–3.600	RTTY/Data	21.070–21.110	RTTY/Data
3.585–3.600	Automatically controlled data stations	21.090–21.100	Automatically controlled data stations
3.590	RTTY/Data DX	21.150	IBP/NCDXF beacons
3.790–3.800	DX window	21.340	SSTV
3.845	SSTV	21.385	QRP SSB calling frequency
3.885	AM calling frequency	24.920–24.925	RTTY/Data
3.985	QRP SSB calling frequency	24.925–24.930	Automatically controlled data stations
7.030	QRP CW calling frequency	24.930	IBP/NCDXF beacons
7.040	RTTY/Data DX	28.060	QRP CW calling frequency
7.070–7.125	RTTY/Data	28.070–28.120	RTTY/Data
7.100–7.105	Automatically controlled data stations	28.120–28.189	Automatically controlled data stations
7.171	SSTV	28.190–28.225	Beacons
7.173	D-SSTV	28.200	IBP/NCDXF beacons
7.285	QRP SSB calling frequency	28.385	QRP SSB calling frequency
7.290	AM calling frequency	28.680	SSTV
10.130–10.140	RTTY/Data	29.000–29.200	AM
10.140–10.150	Automatically controlled data stations	29.300–29.510	Satellite downlinks
14.060	QRP CW calling frequency	29.520–29.580	Repeater inputs
14.070–14.095	RTTY/Data	29.600	FM simplex
14.095–14.0995	Automatically controlled data stations	29.620–29.680	Repeater outputs
14.100	IBP/NCDXF beacons		
14.1005–14.112	Automatically controlled data stations		
14.230	SSTV		

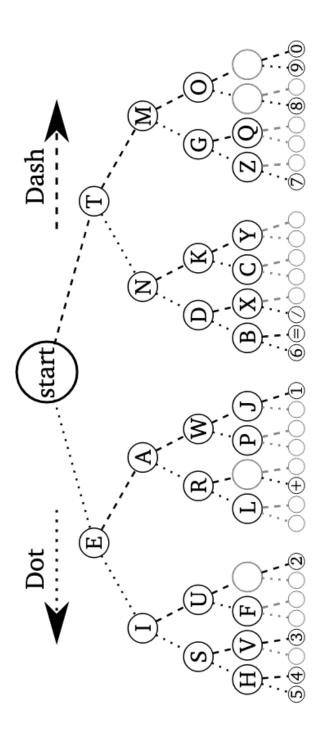
Q Codes

QRG	Your exact frequency (or that of) iskHz.	Will you tell me my exact frequency (or that of)?
QRL	I am busy (or busy with).	Are you busy? (Used to ask if frequency is in use)
QRM	Your transmission is being interfered with (1-5).	Is my transmission being interfered with?
QRN	I am troubled by static (1-5).	Are you troubled by static?
QRO	Increase power.	Shall I increase power?
QRP	Decrease power.	Shall I decrease power?
QRQ	Send faster (wpm).	Shall I send faster?
QRS	Send more slowly (wpm).	Shall I send more slowly?
QRT	Stop sending.	Shall I stop sending?
QRU	I have nothing for you.	Have you anything for me?
QRV	I am ready.	Are you ready?
QRX	I will call you again at (onkHz).	When will you call me again?
QRZ	You are being called by (onkHz).	Who is calling me?
QSB	Your signals are fading.	Are my signals fading?
QSK	I can hear you between signals.	Can I break in on your transmission?
QUIT		
QSL	I am acknowledging receipt.	Can you acknowledge receipt?
	I am acknowledging receipt. I can communicate with direct (or via).	
QSL		Can you communicate with direct or by
QSL	I can communicate with direct (or via).	Can you communicate with direct or by relay?
QSL QSO QSP	I can communicate with direct (or via). I will relay to	Can you communicate with direct or by relay?
QSL QSO QSP QST	I can communicate with direct (or via). I will relay to General call to all amateurs (CQ ARRL).	Can you communicate with direct or by relay? Will you relay to?
QSL QSO QSP QST QSX	I can communicate with direct (or via). I will relay to General call to all amateurs (CQ ARRL). I am listening to onkHz.	Can you communicate with direct or by relay? Will you relay to? - Will you listen to onkHz?
QSL QSO QSP QST QSX QSY	I can communicate with direct (or via). I will relay to General call to all amateurs (CQ ARRL). I am listening to onkHz. Change to another frequency (orkHz).	Can you communicate with direct or by relay? Will you relay to? Will you listen to onkHz? Shall I change to another frequency?

Prosigns

AR	End of message	Often sent as "di-dah-di-dah-dit" (•-•-•)
AS	Stand by	"di-dah-di-di-dit"; used to ask someone to wait
BK	Break	Used to invite the other station to transmit immediately
ВТ	Separator	Break between thoughts or paragraphs ("dah-di-di-dah")
CL	Closing down	Used when signing off the air permanently or for the day
CQ	Calling any station	General call: "di-dah-di-dah" then "dah-dah-di-dah"
CT	Start of message	Used to begin formal traffic messages
EE	Error	Correcting a mistake; usually sent as "di-di-di-di" rapidly
K	Go ahead	Invitation for the other station to transmit
KN	Go ahead, named station only	Stronger version of K—only the called station should respond
R	Roger (message received)	Confirms receipt of last transmission
SK	End of contact	"Silent Key"; final sign-off (di-di-di-dah-di-dah)
SN	Understood	Used in formal message handling (equivalent to "QSL" or "Roger")

A Alpha	November	0	·
B Bravo	Oscar	1	!
C Charlie	P Papa	2	/
D Delta	Q Quebec	3	(
E Echo	Romeo	4)
F Foxtrot	S Sierra	5	&
$G \stackrel{Golf}{}$	Tango	6	•···
H Hotel	U Umbrella	7	• -·-··································
India 	V Victor	8	=
J Juliet	W Whiskey	9	+ ·-·-·
K Kilo	X X-ray	•	
Lima .—	Y Yankee	,	
Mike	Z Zulu	?	



SSB

A (Calling CQ): "CQ CQ CQ, this is K1ABC, Kilo One Alpha Bravo Charlie, calling CQ and standing by."

B (Responding): "K1ABC, this is W2XYZ, Whiskey Two X-ray Yankee Zulu."

A: "W2XYZ, good afternoon, you're 59 here in Boston, Massachusetts. Name is John, Juliet Oscar Hotel November. Back to you, W2XYZ from K1ABC."

B: "Thanks John, you're 59 as well in New Jersey. Name is Mike, Mike India Kilo Echo. Nice to meet you, John. K1ABC, this is W2XYZ."

A: "Very good Mike, thanks for the QSO. 73 and have a great day. K1ABC is now clear."

SSB Contest

Activator (**A**) **calling:** "CQ POTA, CQ Parks on the Air, this is K1ABC, Kilo One Alpha Bravo Charlie, calling CQ POTA and standing by."

Hunter (B) responds: "K1ABC, this is W2XYZ."

Activator (A): "W2XYZ, you're 59 into park K-1234."

Hunter (B): "Thanks for the 59. You're 57 in New Jersey. 73!"

Activator (**A**): "Copy the 57 New Jersey. Thanks for hunting! QRZ, this is K1ABC, park K-1234."

CW

A (Calling CQ): "CQ CQ CQ DE K1ABC K1ABC K1ABC K" (Calling any station, this is K1ABC, standing by)

B (Responding): "K1ABC DE W2XYZ W2XYZ K" (K1ABC, this is W2XYZ, over)

A: "W2XYZ DE K1ABC UR 599 IN MA. NAME JOHN. HW? W2XYZ DE K1ABC K" (You're 599 in Massachusetts. My name is John. How do you copy?)

B: "K1ABC DE W2XYZ R UR 589 IN NJ. NAME MIKE. RIG KX3, 10W. WX SUNNY. K1ABC DE W2XYZ K"

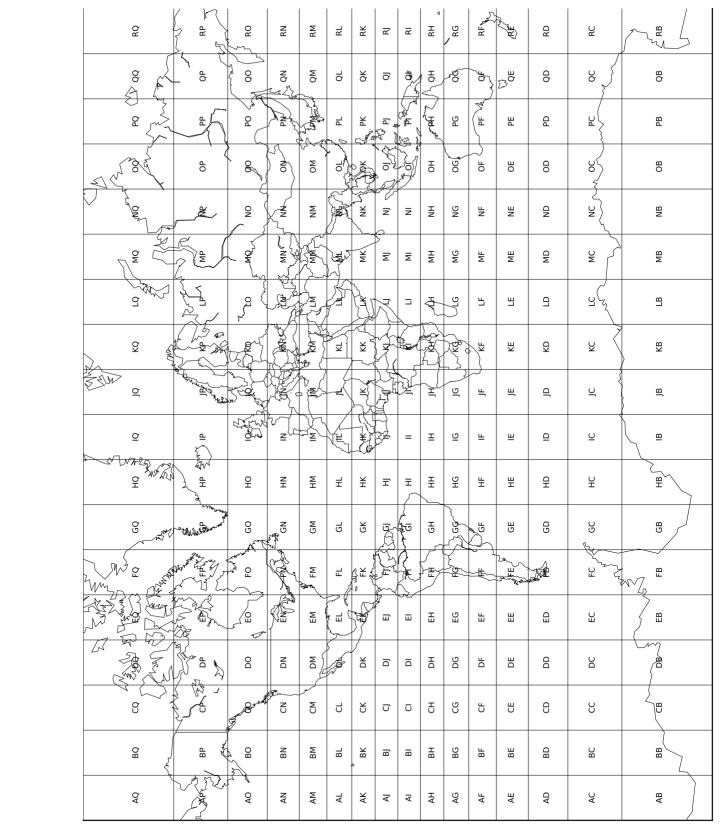
(Roger, you're 589 in New Jersey. My name is Mike. My rig is a KX3 running 10 watts. Weather is sunny.)

A: "R TNX MIKE. 73 ES HPE CUAGN. W2XYZ DE K1ABC SK" (Roger, thanks Mike. Best regards and hope to see you again. Signing off.)

Callsign Country Prefixes

K, N, W	United States	СТ	Portugal
AA-AL	United States	LU	Argentina
VE	Canada	PY	Brazil
VA, VO, VY	Canada	CX	Uruguay
ZL	New Zealand	YV	Venezuela
VK	Australia	XE	Mexico
JA, JE, JH	Japan	TI	Costa Rica
G, M	United Kingdom	OA	Peru
F	France	CE	Chile
DL	Germany	HL	South Korea
I	Italy	BY, BG, BH	China
ON	Belgium	ПС	Thailand
ON	Deigiaiti	HS	manand
PA	Netherlands	9V	Singapore
PA	Netherlands	9V	Singapore
PA SM, SA	Netherlands Sweden	9V VU	Singapore India
PA SM, SA OH	Netherlands Sweden Finland	9V VU 4X, 4Z	Singapore India Israel
PA SM, SA OH LA, LB	Netherlands Sweden Finland Norway	9V VU 4X, 4Z ZS	Singapore India Israel South Africa
PA SM, SA OH LA, LB OE	Netherlands Sweden Finland Norway Austria	9V VU 4X, 4Z ZS SU	Singapore India Israel South Africa Egypt
PA SM, SA OH LA, LB OE OK	Netherlands Sweden Finland Norway Austria Czech Republic	9V VU 4X, 4Z ZS SU A6	Singapore India Israel South Africa Egypt United Arab Emirates
PA SM, SA OH LA, LB OE OK SP	Netherlands Sweden Finland Norway Austria Czech Republic Poland	9V VU 4X, 4Z ZS SU A6 A7	Singapore India Israel South Africa Egypt United Arab Emirates Qatar

	F070	FN79	FN78	FN77	FN76	FN75	FN74	FN73	FN72	FN71	FN70	FM79	FM78	FM77	FM76	FM75	FM74	FM73	FM72	FM71	FM70	FL79	FL78	FL77	FL76	FL75	FL74
Column C	F060	FN69	FN68	FN67	FN66	L L	mPN64	FN63	FN62	FN61	FN60	FM69	FM68	FM67	FM66	FM65	FM64	FM63	FM62	FM61	FM60	FL69	FL68	FL67	FL66	FL65	FL64
Column C	F050	پې FN5 پېر	FM5B	FNS	FN56	FN55	FNRA	FN53	FN52	FN51	FN50	FM59	FM58	FM57	FM56	FM55	FM54	FM53	FM52	FM51	FM50	FL59	FL58	FL57	FL56	FL55	FL54
Construction Cons	F040	FN		FN47	FN46		_FN44	PNA32	SE C	Z.	FN40	FM49	FM48	FM47	FM46	FM45	FM44	FM43	FM42	FM41	FM40	FL49	FL48	FL47	FL46	FL45	FL44
Corrections	F030	FN39	FN38		FN36	ZFN35	N34	JEENHY	M32.	FN31	FN30	FM39	FM38	FM37	FM36	FM35	FM34	FM33	FM32	FM31	FM30	FL39	FL38	FL37	FL36	FL35	FL34
Construction Cons	F020	FW29		FN27	FN26	£ 2	FN24	FN23	FN22	ĮĘ,	F. Z.O.	62MJ		FM27	FM26	J}M25	FM24	FM23	FM22	FM21	FM20	FL29	FL28	FL27	FL26	FL25	K L24
Consiste	F010	Service FN198		1	FN16	FN1 SIN1	FN1436	FINIS	FN []	FN11	FN10	3 FM19		FMI	- OIMI-	FM15	PM14	FM13	FM12	FM11	FM10	FL19	FL18	FL17) M 16	FLIE	
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Correction Cor	E090	EN99	EN98		EN96	EN95	ARAN S	EN93	ZEN9Z	EN91	EN90	- EMB	EM98	STEMBLY	7EM96	EM95	EM94	EM93~	PM93	EW91	06W) El/99	BT3.	E197) 	F255	EL94
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Corrections	E070	EN79	EN78	ENAZ7	EN T	15 E	EN74	EN73	EN72	EN71		EM79	WW W	EM77	EM176	EM75	EM74	EM73	EM72	EM 71	- 7	ET.79	EL78	EL77	EL76	EL75	EL74
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2	0800	N N 89		CIVE	CN86	CN85	CN84	CN83	CN82	CN81	CN80	CM89	CMBB	CM87	CM86	CM85	CM84	CM83	CM82	CM81	CM80	CL89	CL88	CL87	CL86	CL85	CL84
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World Maidenhead Grid Map

https://www.dxengineering.com/techarticles/dxegeneralnews/download-a-free-worldwide-grid-square-map-from-dx-engineering

ARRL Frequency Allocation Chart

https://www.arrl.org/graphical-frequency-allocations

ARRL Considerate Operator's Frequency Guide

https://www.arrl.org/considerate-operator

ARRL Communicating with Other Hams

https://www.arrl.org/files/file/Get%20on%20the%20Air/Comm%20w%20Other%20Hams-Q%20Signals.pdf

Icom US Grid Square Map

https://www.icomamerica.com/lineup/amateur/Band Plan Map/

Icom Common Prefixes of Countries

https://www.hamqsl.com/bandchar.pdf