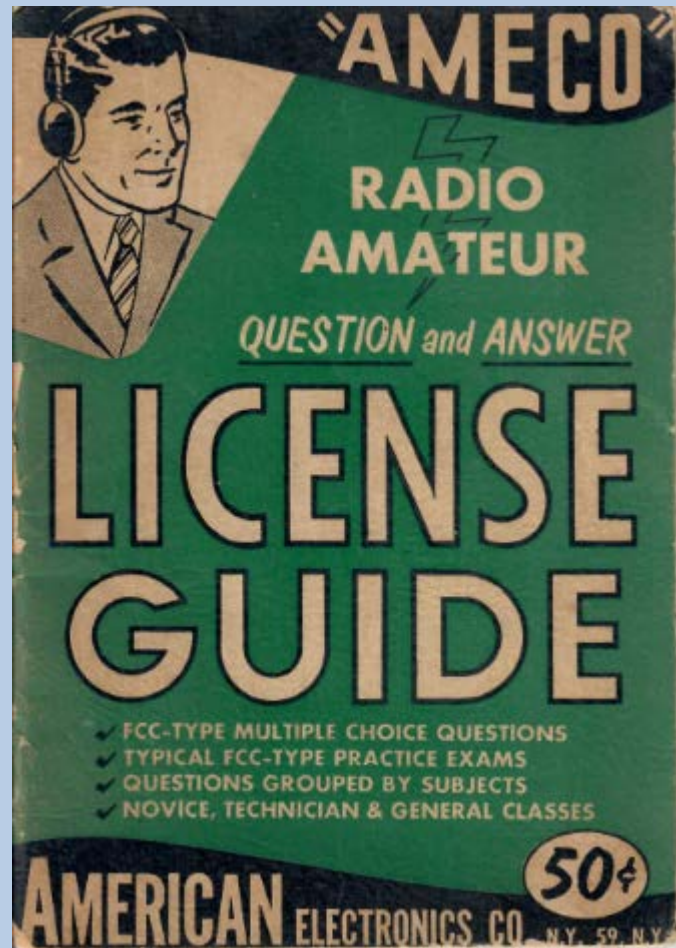


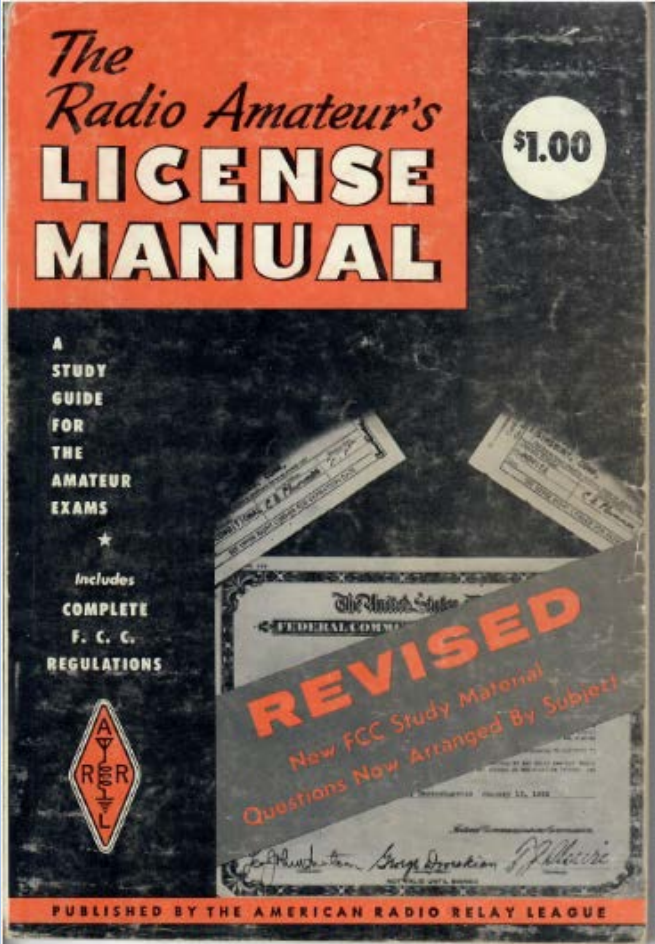
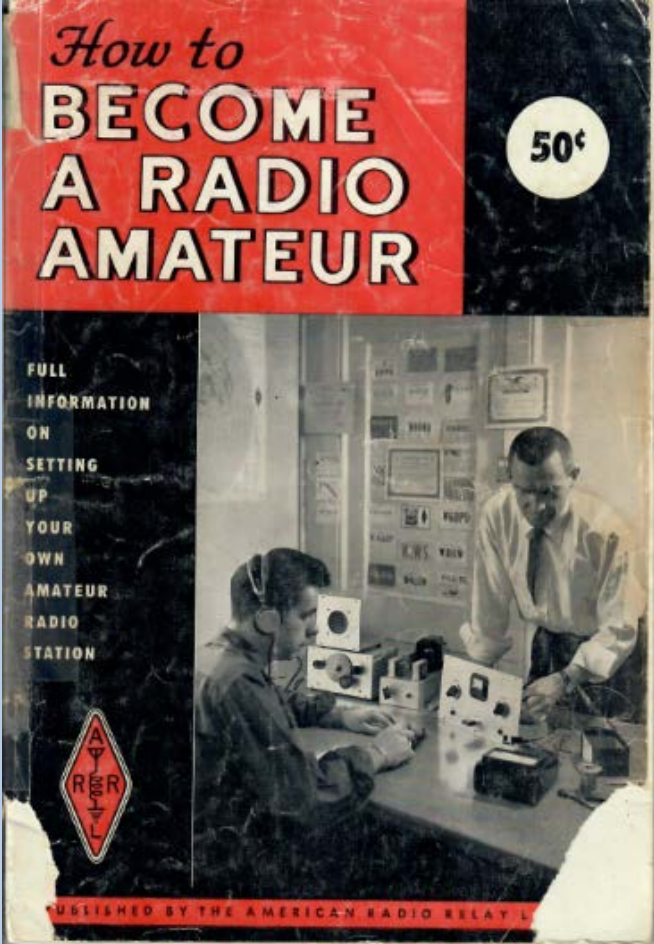
John A. Deithloff

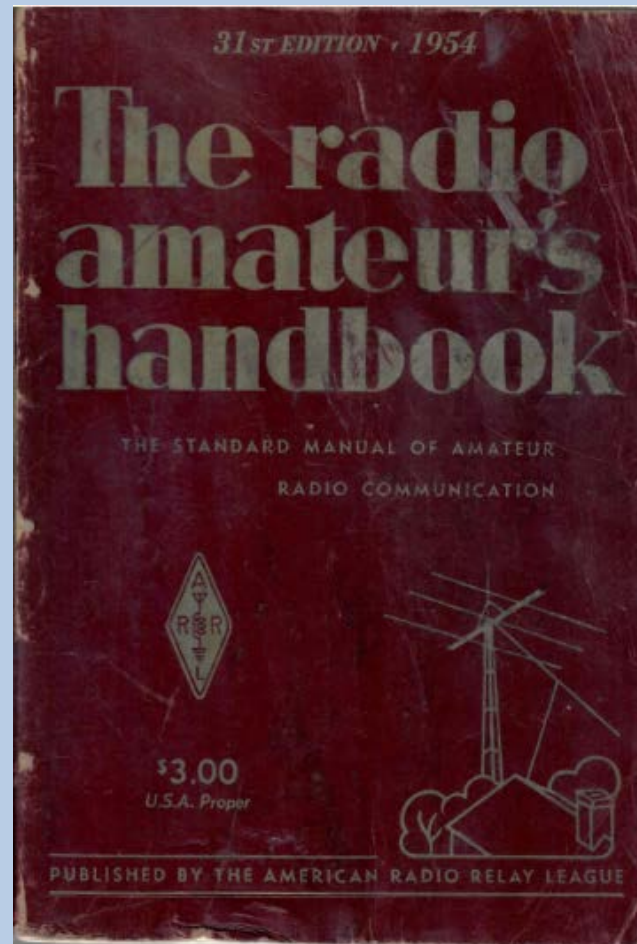
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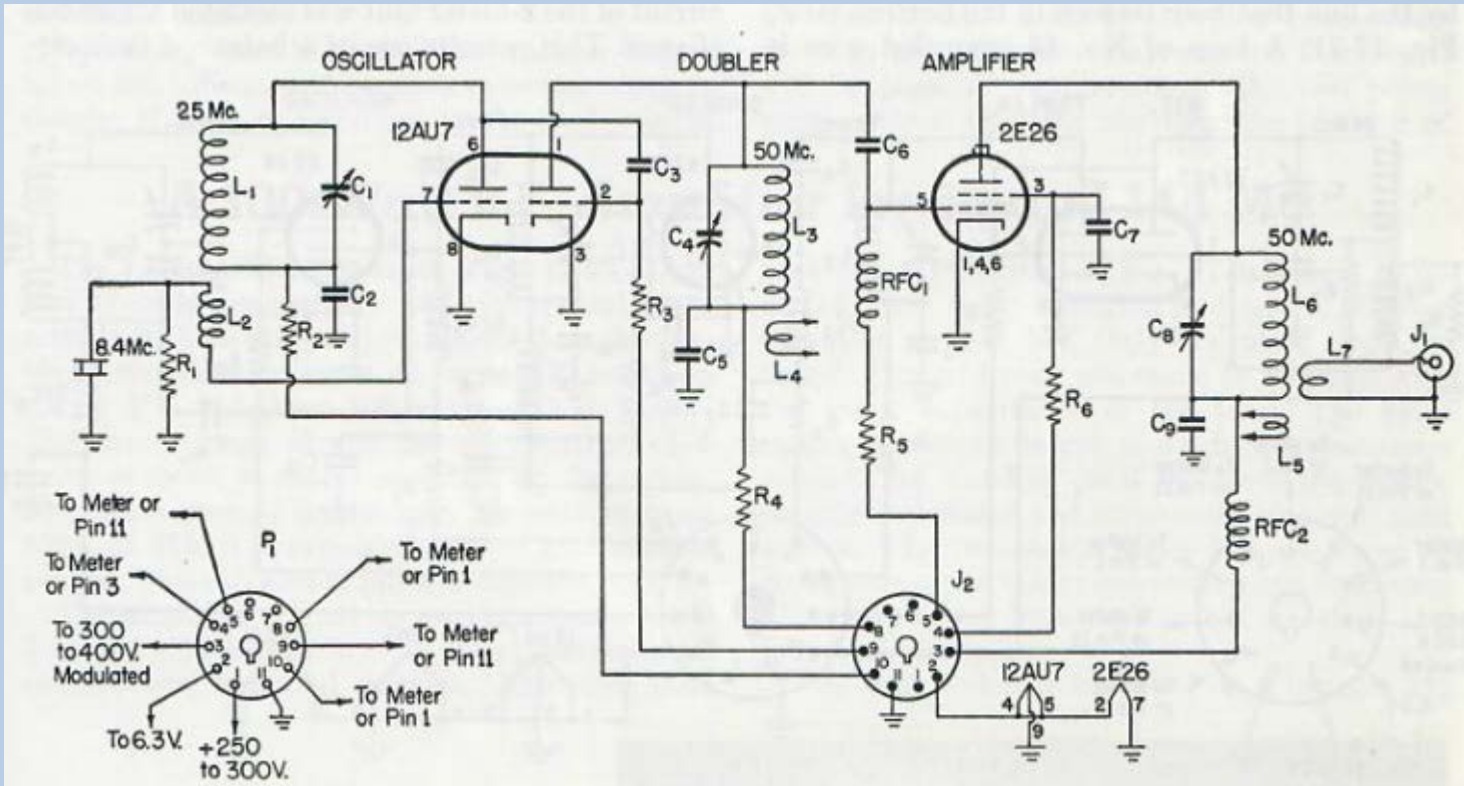
Amateur Radio License since 1954











6M Transmitter



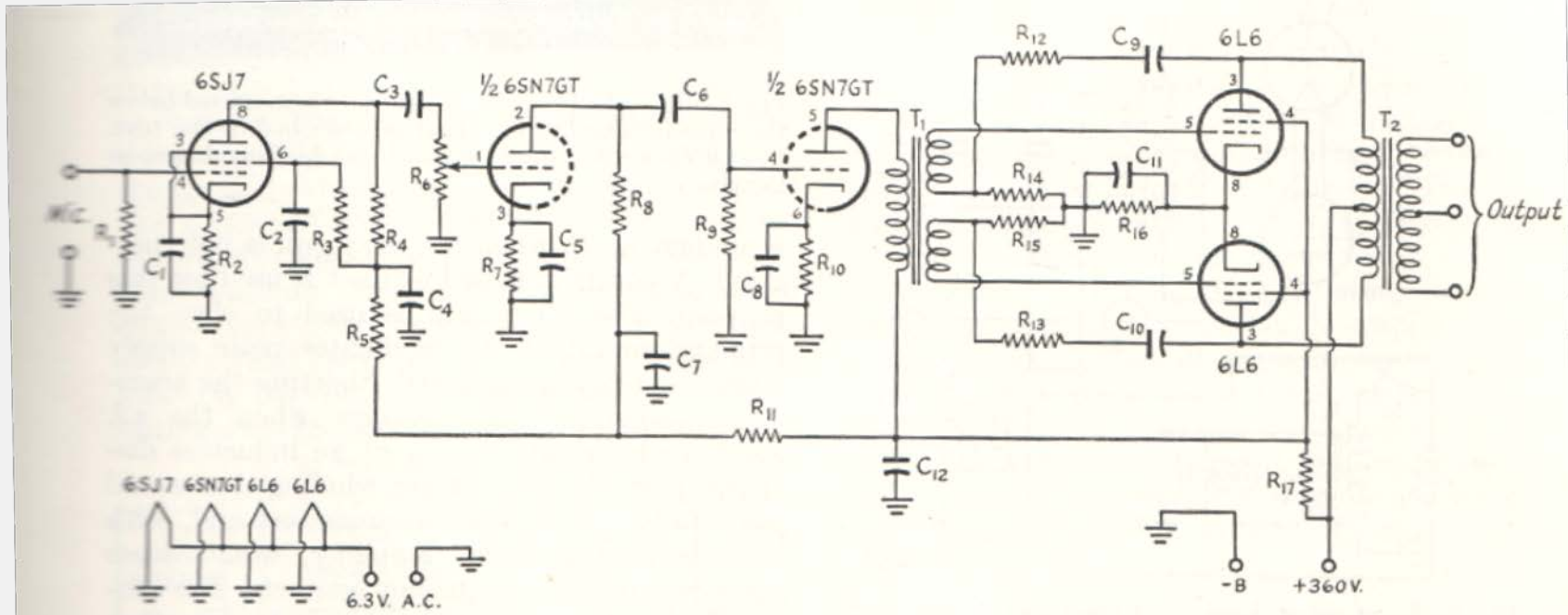
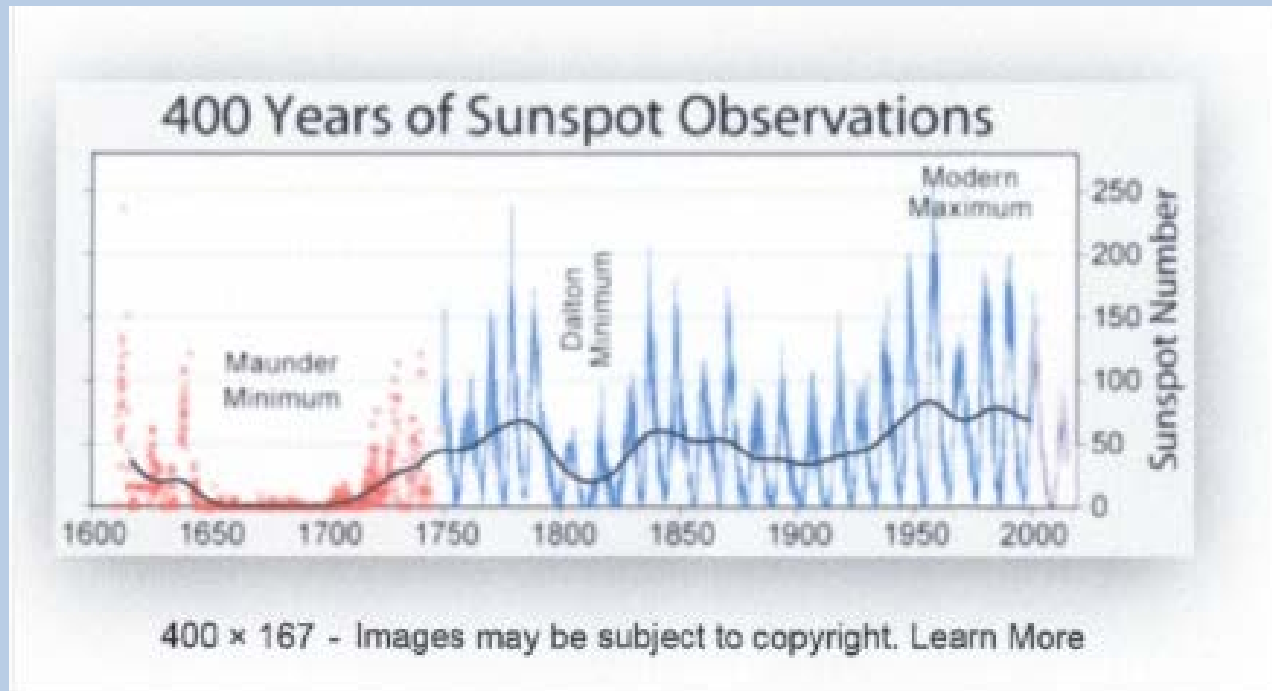


Fig. 9-27 — Circuit diagram of speech amplifier using 6L6s with negative feed-back, suitable for driving Class B modulators up to 500 watts output.

AM Modulator





11 Year Sunspot Cycle



ITU Common Amateur Radio Country Prefixes

1A* (SMO) of Malta (Rome)	BV, BN-BX Taiwan
1S* Spratly Is	BV9P Pratas Is
2I Northern Ireland	BY China
3A Monaco	C2 Nauru
3B6, 3B7 Agalega & St. Brandon Is	C3 Andora
3B8 Mauritius	C4 Cyprus
3B9 Rodriguez Is	C5 The Gambia
3CØ Annobon Is	C6 Bahamas, The
3C1 Equatorial Guinea	C8-C9 Mozambique
3D2/C Conway Reef	CA-CE Chile
3D2/F Fiji	CE9 Antarctica & South Shetland Is
3D2/R Rotuma Is	
3DA Swaziland	CEØX San Felix & San Ambrosio Is
3V Tunisia	CEØY Easter Is
3W Vietnam	CEØZ Juan Fernandez Is
3X Guinea	CF-CK Canada
3Y Bouvet Is	CL-CM Cuba
3Y Peter 1 Is	CN Morocco





ITU Common Amateur Radio Country Prefixes

I Italy	R8-0 Asiatic Russia	VU7 Lakshadweep Is
IMØ, ISØ Sardinia	R1AN Antarctica	VY Canada
J2 Djibouti	R1FJ Franz Josef Land	W U.S.A.
J3 Grenada	R1MV Malyj Vysotskij Is	WH6-WH7 Hawaii
J4 Greece	S2 Bangladesh	WL Alaska
J5 Guinea-Bissau	S5 Slovenia	XA-XI Mexico
J6 Saint Lucia	S7 Seychelles	XA-XI Revillagigedo
J7 Dominica	S9 Sao Tome & Principe	XT Burkina Faso
J8 Saint Vincent	SA-SM Sweden	XU Cambodia
JA-JS Japan	SN-SR Poland	XV Vietnam
JD1 Minami-Torishima	SØ* Western Sahara	XW Laos
ina JD1 Ogasawara	ST Sudan	XX9 Macao
JT-JV Mongolia	SU Egypt	XY-XZ Myanmar (Burma)
JW Svalbard	SV-SZ Greece	YA Afghanistan
JX Jan Mayen	SV/A Mount Athos	YB-YH Indonesia
JY Jordan	SV5 Dodecanese	YI Iraq
K U.S.A.	SV9 Crete	YJ Vanuatu
KØ4 Antarctica	T19 Cocos Is	YK Syria
KG4 Guantanamo Bay	T2 Tuvalu	YL Latvia
KH1 Baker & Howland Is	T3Ø Western Kiribati Is	YM Turkey
KH2 Guam	T31 Central Kiribati Is	YN Nicaragua
KH3 Johnston Is	T32 Eastern Kiribati Is	YO-YR Romania
KH4 Midway Is	T33 Banaba Is	YS El Salvador
KH5 Palmyra & Jarvis Is	T4 Cuba	YT-YU Serbia
KH5K Kingman Reef	T5 Somalia	YV-YY Venezuela
KH6-KH7 Hawaii	T6 Afghanistan	YVØ Aves Is
KH7K Kure Is	T7 San Marino	Z2 Zimbabwe
KH8 American Samoa	T8 Palau	Z3 Macedonia
KH8 Swains Is	TA-TC Turkey	Z6 Kosovo
KH9 Wake Is	TD Guatemala	Z8 South Sudan
KHØ North Mariana Is	TE Costa Rica	ZA Albania
KL Alaska	TF Iceland	ZB Gibraltar
KP1 Navassa Is	TG Guatemala	ZC4 U.K. Sov. Base on Cyprus





ITU Common Amateur Radio Country Prefixes

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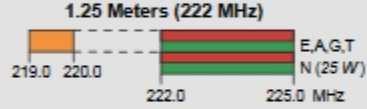
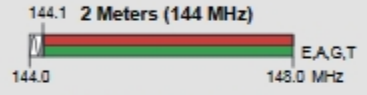
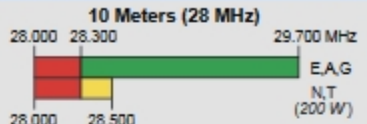
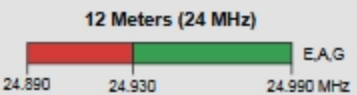
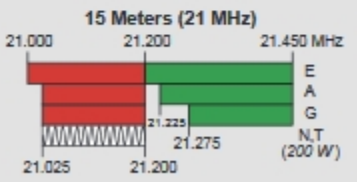
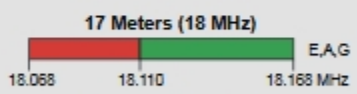
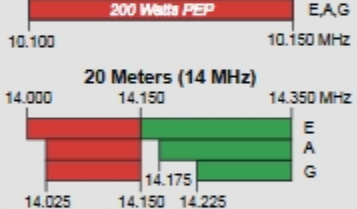
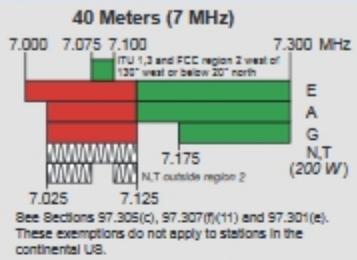
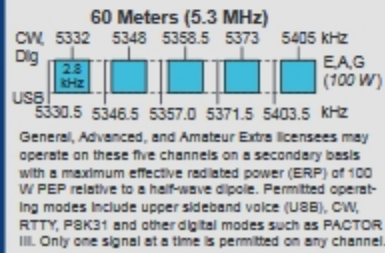
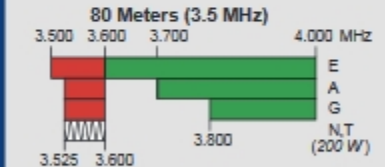
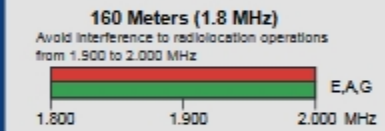
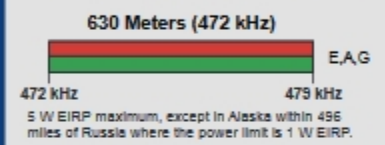
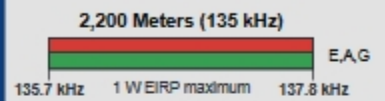


US Amateur Radio Bands

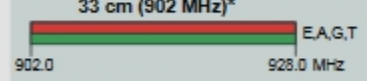
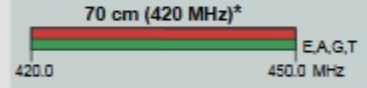
US AMATEUR POWER LIMITS

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.

Amateurs wishing to operate on either 2,200 or 630 meters must first register with the Utilities Technology Council online at <https://uto.org/plo-database-amateur-notification-process/>. You need only register once for each band.



*Geographical and power restrictions may apply to all bands above 420 MHz. See The ARRL Operating Manual for information about your area.



All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	10.0-10.5 GHz ±	122.25-123.0 GHz
2350-2450 MHz	24.0-24.25 GHz	134-141 GHz
3300-3500 MHz	47.0-47.2 GHz	241-250 GHz
5650-5925 MHz	76.0-81.0 GHz	All above 275 GHz

± No pulse emissions

KEY

Note: 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 ARRLWeb at www.arrl.org for detailed band plans.

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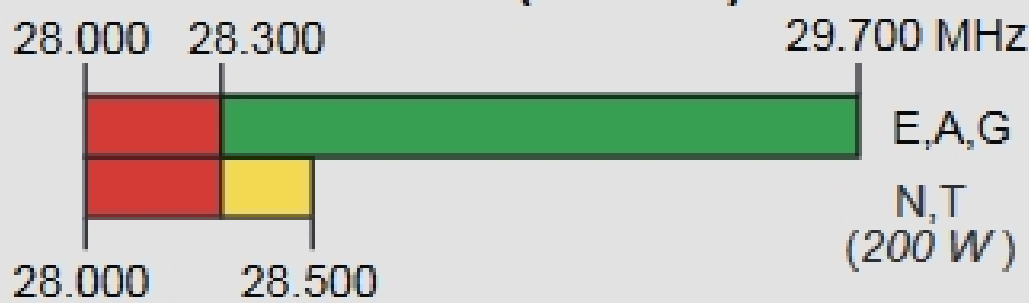
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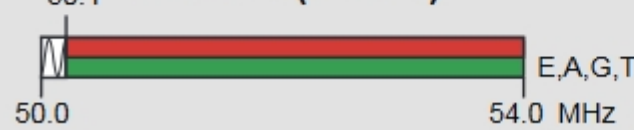
Exams: 860-594-0300 email: vec@arrl.org



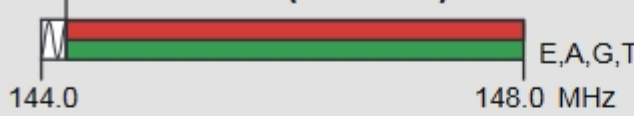
10 Meters (28 MHz)



6 Meters (50 MHz)



2 Meters (144 MHz)



1.25 Meters (222 MHz)



*Geographical and power restrictions may apply to all bands above 420 MHz. See *The ARRL Operating Manual* for information about your area.

KEY

Note:

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.

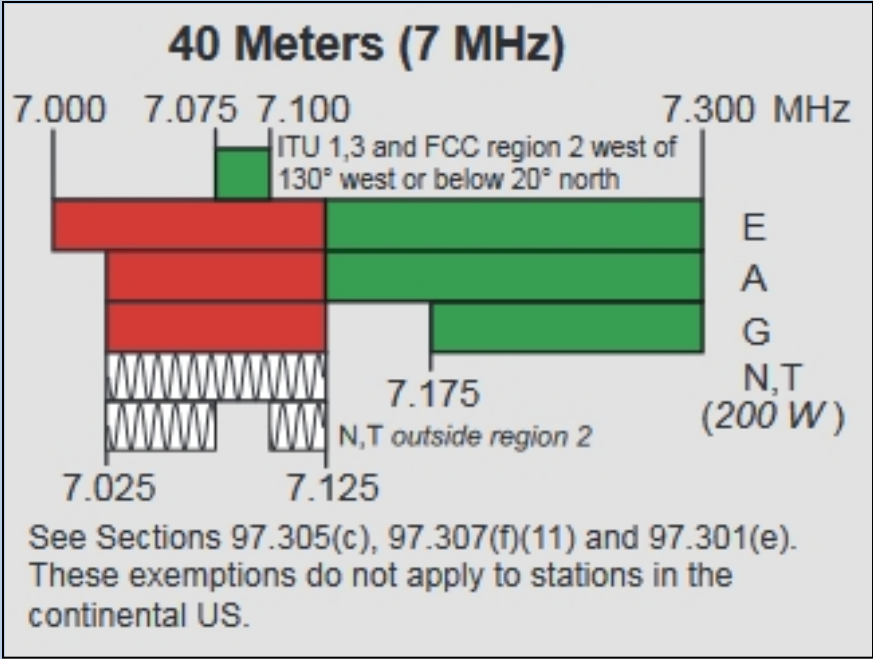
Test transmissions are authorized above 51 MHz, except for 219-220 MHz

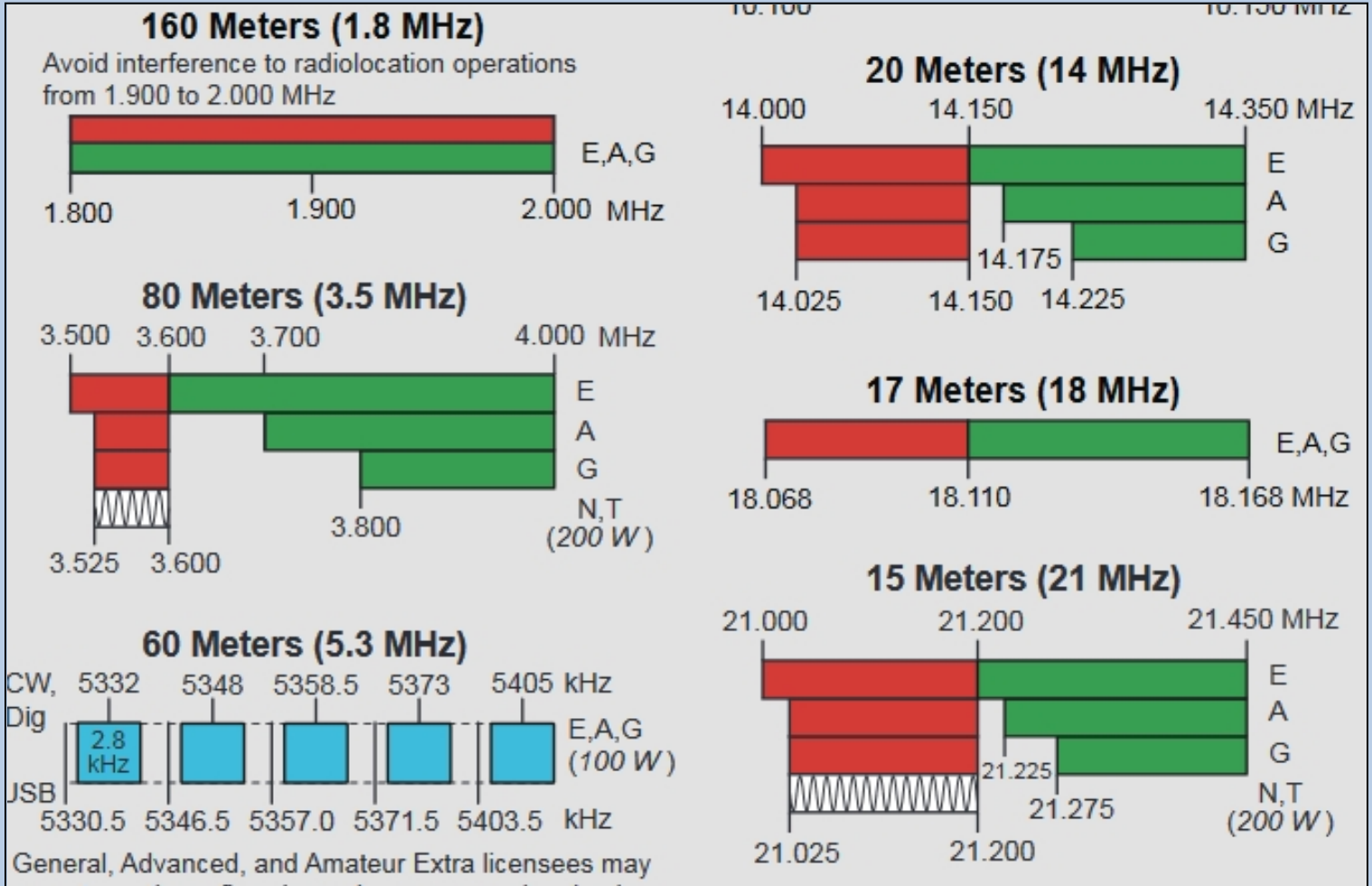
-  = RTTY and data
-  = phone and image
-  = CW only
-  = SSB phone
-  = USB phone, CW, RTTY, and data
-  = Fixed digital message forwarding systems only

- E** = Amateur Extra
- A** = Advanced
- G** = General
- T** = Technician
- N** = Novice

See *ARRLWeb* at www.arrl.org for detailed band plans.







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HIGH FREQUENCY PRIVILEGES CHART

	28000 kHz	28200	28300	28500	29300	29600	29700
EXTRA	CW & DATA	CW Beacons	PHONE	SSB PHONE USB	SATS	FM	
ADVANCED	CW & DATA	CW Beacons	PHONE	SSB PHONE USB	SATS	FM	
GENERAL	CW & DATA	CW Beacons	PHONE	SSB PHONE USB	SATS	FM	
TECH&NOVICE	CW & DATA	CW Beacons	PHONE	.....	.....	.....	.....

	14000 kHz	14025	14100	14150	14175	14225	14350
EXTRA	CW	CW & DATA			DX PHONE	SSB PHONE USB	
ADVANCED	.....	CW & DATA	.....			SSB PHONE USB	
GENERAL	.....	CW & DATA	.....			SSB PHONE USB	

	7000 kHz	7025	7125	7175	7300
EXTRA		CW & DATA		SSB PHONE LSB	
ADVANCED		CW & DATA		SSB PHONE LSB	
GENERAL		CW & DATA	.....	SSB PHONE LSB	
TECH&NOVICE		CW 200 WATTS	.....		

10
METER
Best Days

& Evenings
20
METERS
Best Days
& Nights

40
METER
Best Days
& Evenings



HF Presentation





HF Presentation





**Dual Band
VHF – UHF
Hung from
Rafter Brace**



**HF antenna
Mounted on brace
(radials on right pic)**









