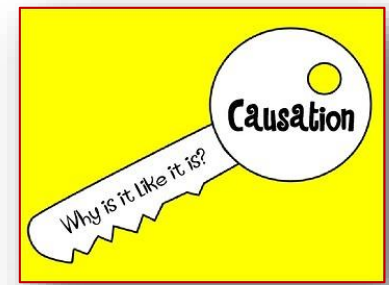


I am supposed to use what call
sign? Surely you are joking!!
(Don't call me Shirley)

An adventure in FCC legalese . . .

Dave Wickert AE7TD
dwickert@hotmail.com

Key Concept



- Here in the USA, the FCC requires stations to be “licensed” to operate a transmitter
 - Implemented under the Radio Act of 1912 and the Telecommunications Act of 1934, as amended in 1985 and 1996 through Title 47 CFR
 - We do not require licenses for receivers
- Identification is done through “call signs”
- Types of license
 - Licensed by fee, e.g. TV Broadcast station, GMRS
 - Licensed by certification, e.g. WiFi, Bluetooth
 - Licensed by examination, e.g. us ☺
 - Licensed by “rule”, e.g. CB, FRS, MURS
(created after 1985)



FCC Implementation



From The ARRL Ham Radio License Manual: *

“An Amateur Radio license consists of two parts -- an **operator license** and a **station license**.

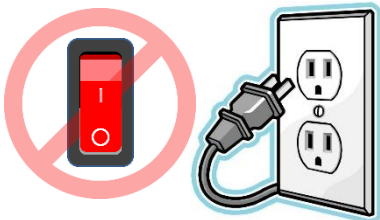
- In most other services licenses are granted separately, such as for broadcast stations where employees actually operate the equipment.
- The operator license gives you permission to operated an amateur station according to the rules of the Amateur Service.
- The station license authorizes you to have an amateur station.
- The combined license is an amateur operator/primary station license.
- Each person can only have one such license.”

Station Licensee

- FCC §97.5(a) requires, that when used, an amateur station's transmitting apparatus must be ***under the physical control*** of a person named in an amateur station license grant
 - The primary station license is granted together with the amateur operator license.

Con-trol /kən'trōl/ *n*: power to direct, determine or regulate

When “physical” is applied in this case it means, for example, power on/off, change location, cabling, attachments, etc.





UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

AMATEUR RADIO LICENSE

AE7TD

WICKERT, DAVID A
23966 NE 69TH PL
REDMOND, WA 98053

FCC Registration Number (FRN): 0020789913

Special Conditions / Endorsements

NONE

Grant Date	Effective Date	Print Date	Expiration Date
06-01-2011	06-01-2011	06-01-2011	06-01-2021
File Number	Operator Privileges		Station Privileges
0004706141	Amateur Extra		PRIMARY

THIS LICENSE IS NOT TRANSFERABLE

(Licensee's Signature)

FCC 660 - May 2007

Cut Along This Line

Cut Along This Line

Call Sign / Number AE7TD	Grant Date 06-01-2011	Expiration Date 06-01-2021	File Number 0004706141	Print Date 06-01-2011	Effective Date 06-01-2011
Operator Privileges Amateur Extra		Station Privileges PRIMARY		THIS LICENSE IS NOT TRANSFERABLE	
WICKERT, DAVID A 23966 NE 69TH PL REDMOND, WA 98053		Special Conditions / Endorsements: NONE			
AMATEUR RADIO LICENSE					
FCC Registration Number (FRN): 0020789913					

FCC 660 - May 2007

(Licensee's Signature)
FEDERAL COMMUNICATIONS COMMISSION



Licensee: This is your radio authorization in sizes suitable for your wallet and for framing. Carefully cut the documents along the lines as indicated and sign immediately upon receipt. They are not valid until signed.

The Commission suggests that the wallet size version be laminated (or another similar document protection process) after signing. The Commission has found under certain circumstances, laser print is subject to displacement.

Cut Along This Line

Cut Along This Line

**UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AMATEUR RADIO LICENSE
AE7TD**

WICKERT, DAVID A
23966 NE 69TH PL
REDMOND, WA 98053

FCC Registration Number (FRN): 0020789913

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AE7TD	06-01-2011	06-01-2021	0004706141	06-01-2011	06-01-2011

Operator Privileges	Station Privileges
Amateur Extra	PRIMARY

WICKERT, DAVID A
23966 NE 69TH PL
REDMOND, WA 98053

AMATEUR RADIO LICENSE

FCC Registration Number (FRN): 0020789913

FCC 660 - May 2007

(Licensee's Signature)
FEDERAL COMMUNICATIONS COMMISSION

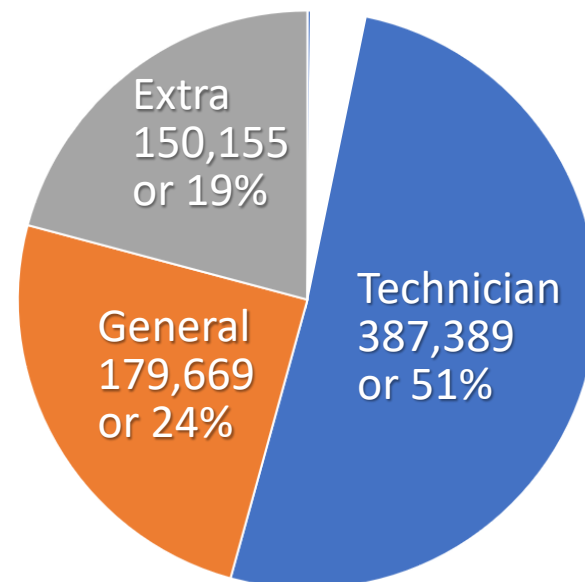
Cut Along This Line

As of Jan 1, 2020 the FCC ULS lists:

License class	
Novice	7,858
Technician	387,389
General	179,669
Advanced	38,442
Extra	150,144
Total	763,502

Source:

<http://www.arrl.org/fcc-license-counts>





UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AMATEUR RADIO LICENSE
AE7TD



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Call Sign / Number AE7TD	Grant Date 06-01-2011	Expiration Date 06-01-2021	File Number 0004706141	Print Date 06-01-2011	Effective Date 06-01-2011		
Operator Privileges Amateur Extra	Station Privileges PRIMARY		THIS LICENSE IS NOT TRANSFERABLE				
WICKERT, DAVID A 23966 NE 69TH PL REDMOND, WA 98053			Special Conditions / Endorsements: NONE				
AMATEUR RADIO LICENSE FCC Registration Number (FRN): 0020789913			(Licensee's Signature) FEDERAL COMMUNICATIONS COMMISSION				

FCC 660 - May 2007

FEDERAL COMMUNICATIONS COMMISSION



Cut Along This Line

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The Commission suggests that the wallet size version be laminated (or another similar document protection process) after signing. The Commission has found under certain circumstances, laser print is subject to displacement.

Station licenses:

- Primary
- Club

In the past, other types were:



- Repeater

And the address had to be a physical location. Operation away from that location required FCC notification (in the far past), or at least <call area> and /P if away from "primary" location

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.

Cut Along This Line

 UNITED STATES OF AMERICA FEDERAL COMMUNICATIONS COMMISSION AMATEUR RADIO LICENSE K7LWH 			
ATTN: DAVID O CONDON LAKE WASHINGTON HAM CLUB 12434 NE 60TH KIRKLAND, WA 98033			
FCC Registration Number (FRN): 0001516608			
Special Conditions / Endorsements			
NONE			
Grant Date	Effective Date	Print Date	Expiration Date
05-16-2017	05-16-2017	05-16-2017	05-16-2027
File Number	Operator Privileges		Station Privileges
0007776039			CLUB
THIS LICENSE IS NOT TRANSFERABLE			
_____ (Licensee's Signature)			
FCC 660 - May 2007			

Licensee: This is your radio authorization in sizes suitable for your wallet and for framing. Carefully cut the documents along the lines as indicated and sign immediately upon receipt. They are not valid until signed.

The Commission suggests that the wallet size version be laminated (or another similar document protection process) after signing. The Commission has found under certain circumstances, laser print is subject to displacement.

Cut Along This Line

Cut Along This Line

Call Sign / Number	Grant Date	Expiration Date	File Number	Print Date	Effective Date
K7LWH	05-16-2017	05-16-2027	0007776039	05-16-2017	05-16-2017
Operator Privileges		Station Privileges		THIS LICENSE IS NOT TRANSFERABLE	
		CLUB		Special Conditions / Endorsements:	
				NONE	
ATTN: DAVID O CONDON LAKE WASHINGTON HAM CLUB 12434 NE 60TH KIRKLAND, WA 98033					
AMATEUR RADIO LICENSE					
FCC Registration Number (FRN): 0001516608					
				_____ (Licensee's Signature)	
				FEDERAL COMMUNICATIONS COMMISSION	

Cut Along This Line

Station Licensee



- The station licensee is in physical control of the radio station and is responsible for the proper operation of the station in accordance with the FCC Rules.
- The station licensee (who must be a licensed amateur) designates the station control operator.
 - The control operator can be the station licensee if he or she desires it.
 - The FCC will presume that the station licensee is the control operator, unless documentation to the contrary is in the station records.
 - When the control operator is a different amateur operator than the station licensee, both persons are equally responsible for proper operation of the station.



Control Operator

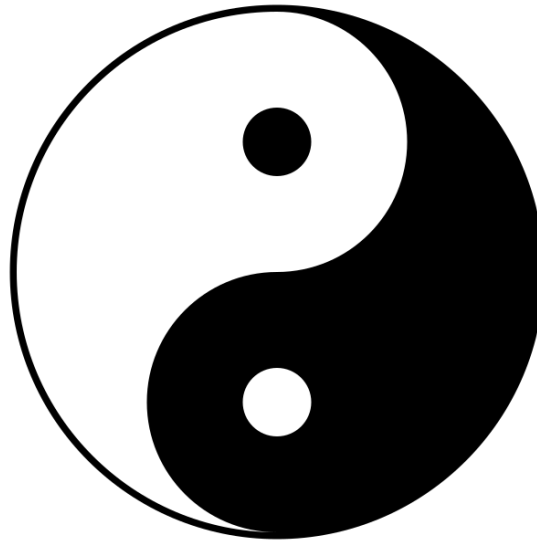
- ***Control operator*** is the licensed amateur responsible for making sure transmissions from a station comply with FCC rules, including:
 - Frequency
 - Mode
 - Power
 - Content
- Control operator is designated by the station's licensee

Control Operator Requirements

- Must have a valid FCC issued Amateur Radio operators license.
- Station must operate within the privileges of the control operator's license.
- Control operator must be present at the **control point** of the station (the on-off switch) or remotely connected by a **control link** (e.g. repeaters) in order to stop transmissions.

Station licensee has physical control of the station apparatus.

❖ Both roles must be filled to transmit.



❖ Both are equally responsible for the station operation

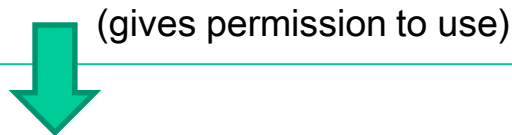
Control operator is responsible for the *immediate* proper operation to assure compliance with the FCC Rules

Station ID

- When in operation, every transmitter has one and only one station licensee
- The assigned call sign of the transmitter is determined by the station licensee
- The assigned call sign of the transmitter is used when in operation
- The control operator's operating license establishes what privileges can be used.
 - If operating with higher privileges than the station licensee then their call sign is appended at the end of the assigned call sign



Ownership is the **legal** right to the possession of a thing. It gives you rights allowing a person to use and enjoy property (physical or intellectual) and the right to convey it to others. The owner of the radio station apparatus does not need to be a licensed ham radio operator. Note: FCC regulations have no mention of “ownership”



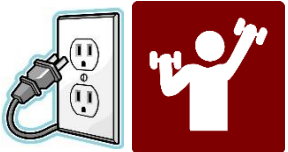
(gives permission to use)

Station Licensee is the person holding an amateur radio station license grant who has physical control of the transmitting apparatus.



(designates)

Control Operator ensures the immediate proper operation of the station to assure compliance with the FCC Rules. A station may only be operated to the extent permitted by the control operator's license class.





This is the most common situation, i.e. all roles are combined into one person – just use your assigned call sign (W7ABC)



Owner “loans” you their equipment (or allows you to access it). You are both the station licensee (in physical control) as well as the control operator – again just use your assigned call sign (W7ABC)



From the FCC's point of view these two scenarios are identical. Ownership of the equipment has no bearing on the situation.



The only issue is the license class difference between the station licensee and the control operator.

There are 3 scenarios (next)

Since the Station Licensee retains physical control, their call sign is used.



(Extra)



(Tech)

If W7XYZ's license class exceeds or equal W7ABC:

Operating within W7ABC's privileges, use "W7XYZ" since W7XYZ retains physical control.



(Tech)



(Extra)

If W7ABC's license class exceeds W7XYZ:

Operating within W7XYZ's privileges, then use "W7XYZ"

Operating within W7ABC's privileges, but outside W7XYZ's, then use "W7XYZ / W7ABC"

However, control operators must remain within their operator license class limits.



W7XYZ

(Extra)



W7ABC

(Tech)

If W7XYZ's license class exceeds or equal W7ABC:

Operating outside W7ABC's privileges, then
STOP – You are violating FCC regulations

Your options:

1. Go back to operating within your Tech privileges and use W7XYZ call sign
2. Get your Station licensee to take over control operator duties, and use W7XYZ call sign



W7XYZ

(Extra)



(Technician-class W7ABC)



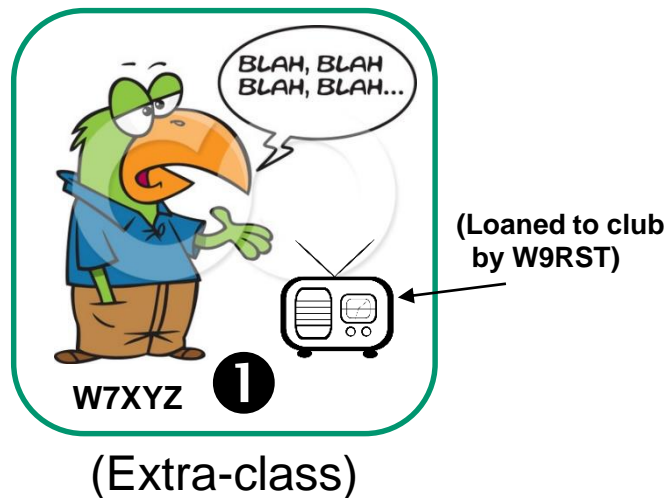
K7LWH

Physical control retained
by Club License Trustee
(Extra-class)

**4th weekend
in June:
Field Day!**



Physical control retained
by Club License Trustee
(Extra-class)



**4th weekend
in June:
Field Day!**



K7LWH



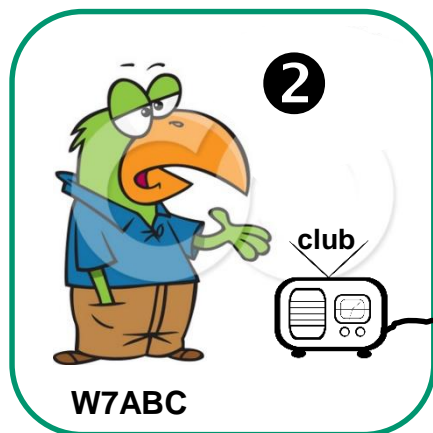
W7XYZ

1

(Loaned to club
by W9RST)

(Extra-class)

Physical control retained
by Club License Trustee
(Extra-class)



W7ABC

2



(Technician-class)
KJ7ABC

(General-class)

4th weekend in June: **Field Day!**



K7LWH

Physical control retained
by Club License Trustee
(Extra-class)



W7XYZ 1

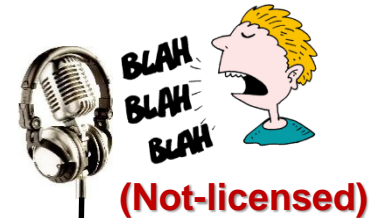
(Extra-class)

(Loaned to club
by W9RST)



W7DEF

(Extra-class)



(Not-licensed)



W7ABC

(General-class)

(Technician-class)
KJ7ABC

4th weekend in June: **Field Day!**



K7LWH

Physical control retained
by Club License Trustee
(Extra-class)



W7XYZ 1

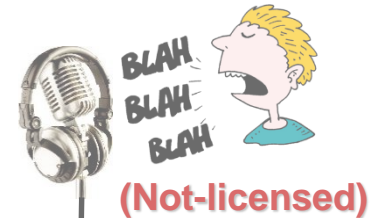
(Extra-class)

(Loaned to club
by W9RST)



W7DEF

(Extra-class)



(Not-licensed)



W7ABC

(General-class)

(Technician-class)
KJ7ABC



4

K7XY

4th weekend in June: **Field Day!**



K7LWH

Physical control retained
by Club License Trustee
(Extra-class)



W7XYZ **1**

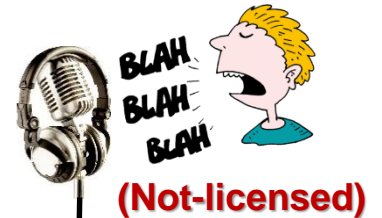
(Extra-class)

(Loaned to club
by W9RST)

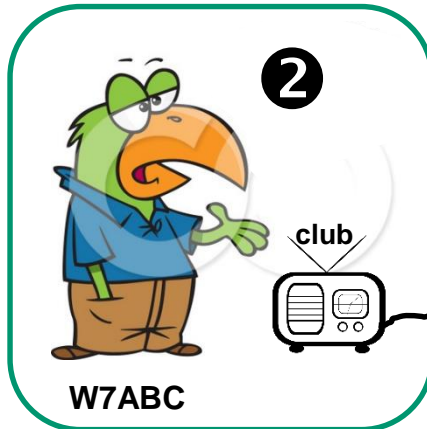


W7DEF

(Extra-class)

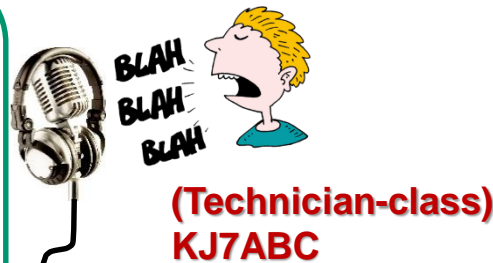


(Not-licensed)



W7ABC

(General-class)



(Technician-class)
KJ7ABC

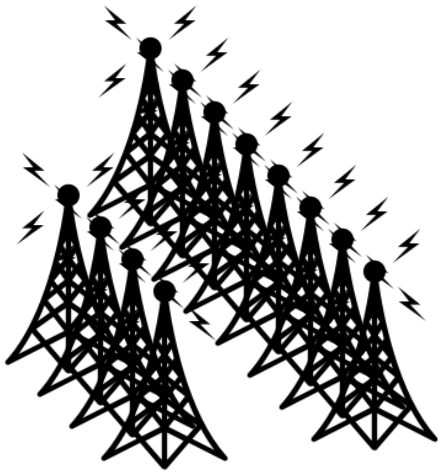


K7XY

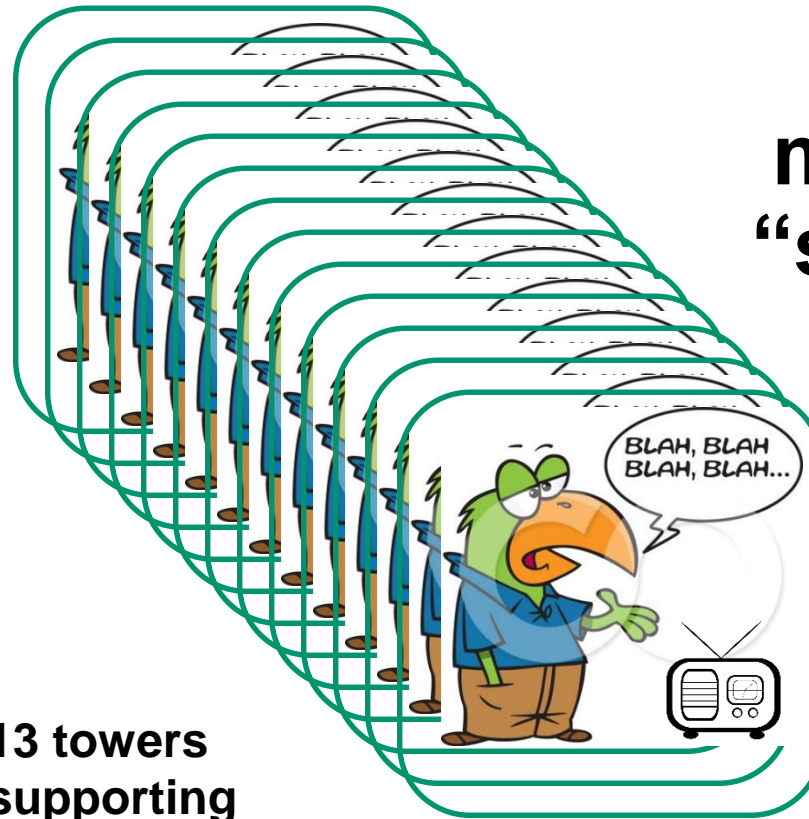
K3LR multi-radio, multi-operator “super station”



Physical control retained
by K3LR (Extra-class)



13 towers
supporting
35 antennas



13 guest operator positions
ICOM 7851 radios, \$12K each

Cool flyby: <https://www.youtube.com/watch?v=KXqjW9lWkgo>

Non-licensed Operation

- Non-licensed people can use a ham radio but only when a control operator is present.
- The control operator is responsible for the content of messages sent by the radio, e.g. inappropriate words, conducting business, etc.
- Suggestion: When you are the licensed control operator, use the “lock” feature of the radio.

What determines the transmitting privileges of an amateur station? (T1E04)

- A. The frequency authorized by the frequency coordinator
- B. The frequencies printed on the license grant
- C. The highest class of license held by anyone on the premises
- D. The class of operator license held by the control operator**



When the control operator is not the station licensee, who is responsible for the proper operation of the station?
(T1E07)

- A. All licensed amateurs who are present at the operation
- B. Only the station licensee
- C. Only the control operator
- D. The control operator and the station licensee are equally responsible**



Who does the FCC presume to be the control operator of an amateur station, unless documentation to the contrary is in the station records? (T1E11)

- A. The station custodian
- B. The third-party participant
- C. The person operating the station equipment
- D. The station licensee**







Why license?

Game: Which ones are right?

Generate revenue for the Gov't

1. Make it hard so only the smart people get to play with radios
2. Radios are complex systems; easy to get wrong
3. Radios easily interfere with each other, including across services and purposes
4. Easy to track who is doing what . . .
(both gov't and individuals can self-police)