



Spokane Repeater Group

By Karl Shoemaker

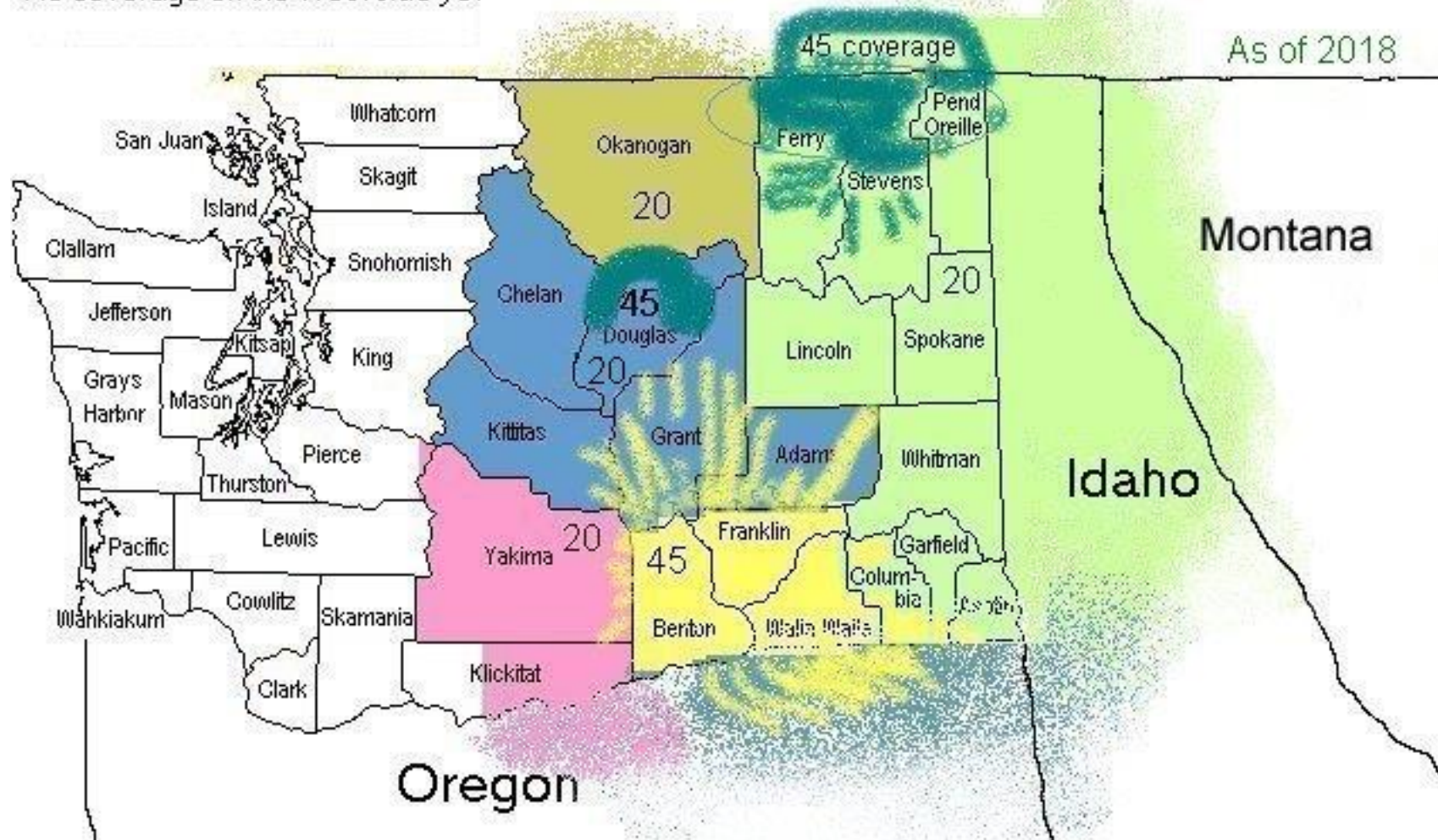
SRG's mission:

- Provide communications for responsible operators.
- High quality sound. Pleasant to listen to.
- Large coverage; Washington, with parts of Idaho, BC and Oregon.
- Using a minimum of 2-meter frequency pairs for the user.
- 147.20 and 145.45 pairs only. (these are access points)
- One “repeater” one System; nothing to turn on or off.

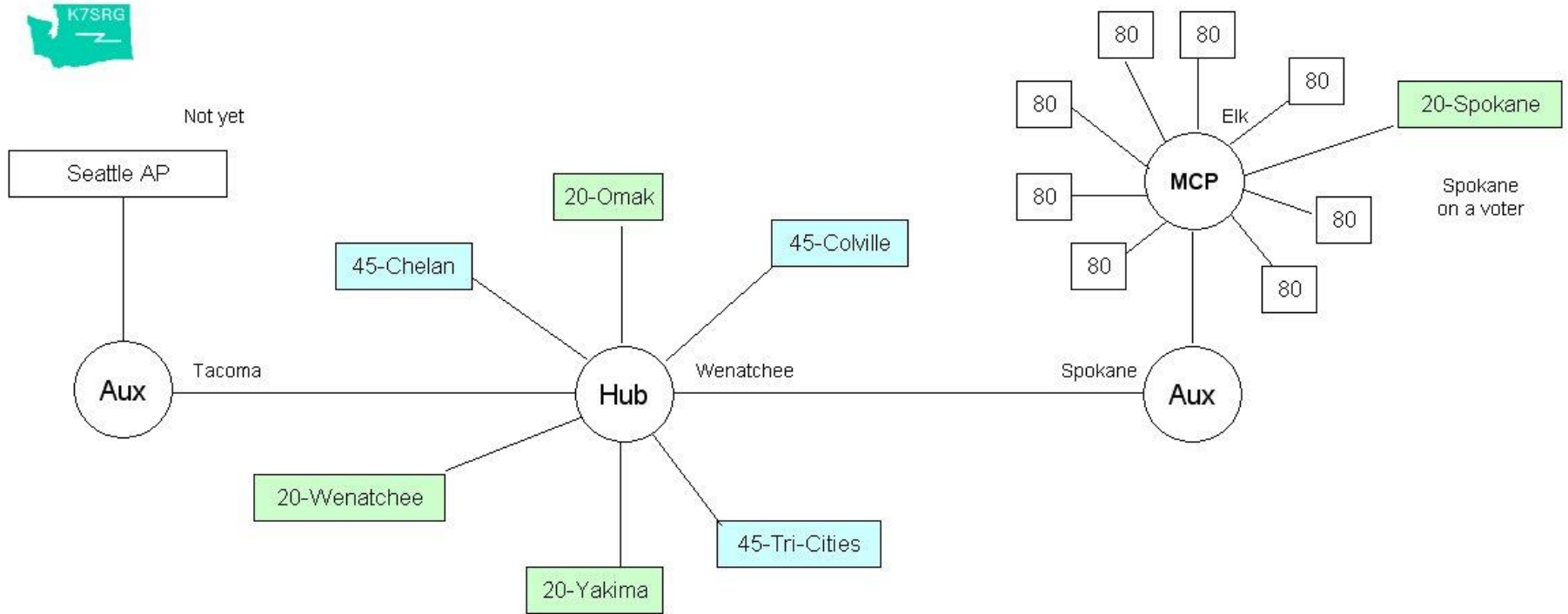
Simple

Coverage map

No coverage on the West side yet



Simplified System diagram



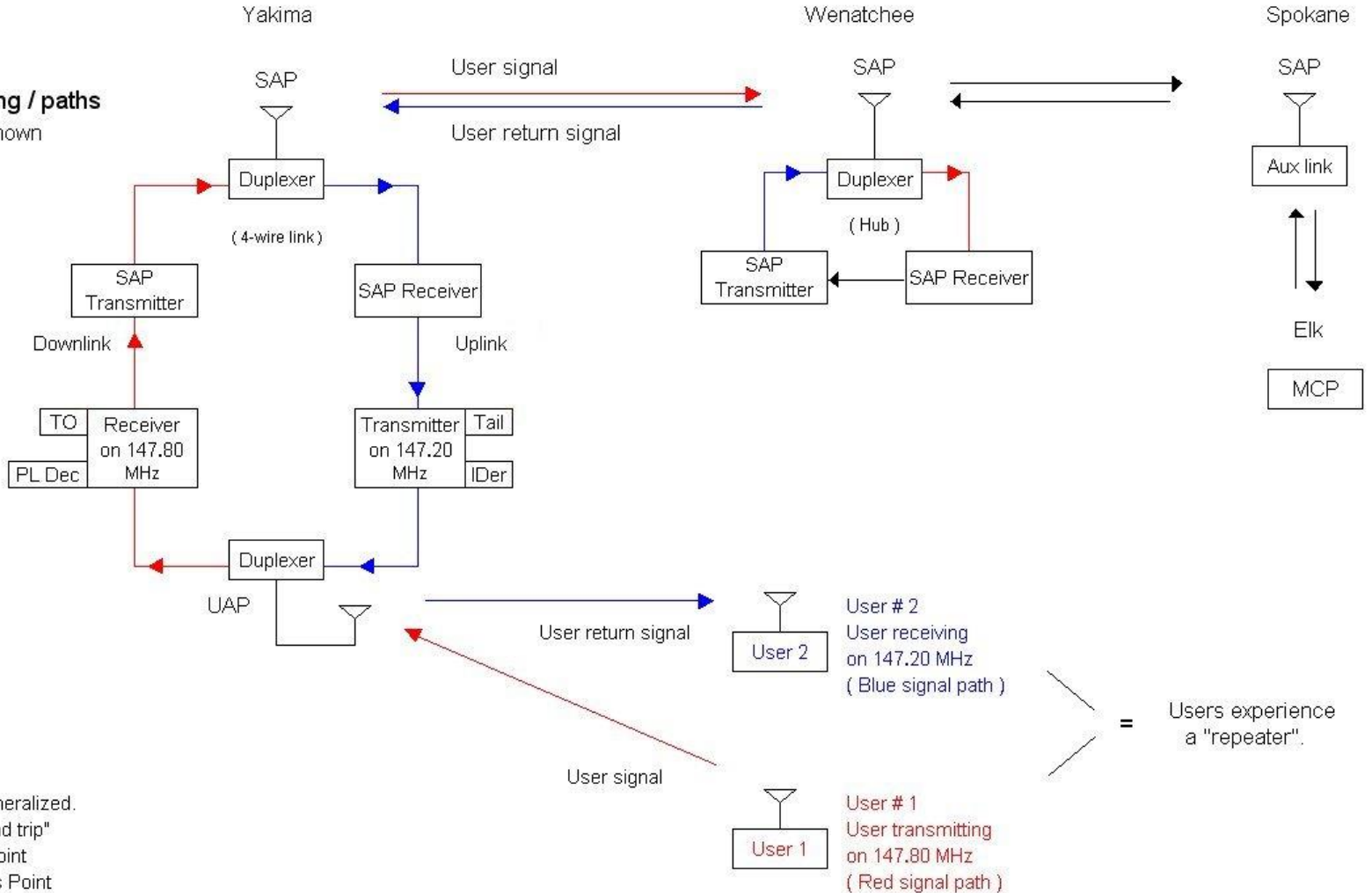
Four 20 Access points

Three 45 Access points



Example for routing / paths

20 Yakima shown



NOTES
 Path distances are generalized.
 User path shown "round trip"
 UAP = User Access Point
 SAP = System Access Point
 MCP = Master Control Point

Users experience a "repeater".

Outages

- They occur seldom (mostly AC grid issues). Traditionally, the equipment has been reliable.
- Everything in the basin goes through the Hub; if it goes down the System is down.
- This will be noticed right away to report the problem.
- Other systems have stand-alone operation (local repeater).
- Local repeater won't help with SRG's mission.

Engineering:

- All components are carefully evaluated. When it's necessary some components are modified.
- Modified components are tested. Adjustment are made if needed.
- High duty “cycle” for System transmitters (user reception).
- Modular components for on-site replacement. Repairs to the defective module can be performed, later at the shop.
- About 17 sites are involved with the System (8* User APs).

(* The UHF repeater is stand alone)



Questions ?

More information can be found on
SRG's web site of:

<http://www.srgclub.org>

Or you can google on line:

- The Club's call sign of K7SRG
- The Author's call sign of AK2O