

V. INTEROPERABILITY

It is the intent of this Plan to encourage all Part 90 (B)(C) eligible agencies to implement communications capability on the National Common and Statewide Tactical channels, even if they do not license private systems on any of the frequencies covered by this Plan. It is also the intent of this Plan to retain,(and use) all present Mutual Aid systems such as Law Enforcement Radio Network (LERN), On Scene Command and Control Radio (OSCCR), Hospital Emergency Ambulance Radio (HEAR), or other similar systems.

A. INTEROPERABILITY AND MUTUAL AID CHANNELS

Ten channels will be reserved for interoperability and mutual aid. Five of these channels are the National Common Channels mandated by the FCC and five additional channels are to be used on a statewide basis.

FCC mandated frequencies to be used as Mutual Aid channels are listed below:

| <u>CHAN #</u> | <u>FREQUENCY</u> | <u>DESIGNATION</u> | |
|---------------|------------------|--------------------------|--------|
| 601 | 821/866.0125 Mhz | National Calling Channel | ICALL |
| 639 | 821/866.5125 Mhz | National Working Channel | ITAC-1 |
| 677 | 822/867.0125 Mhz | National Working Channel | ITAC-2 |
| 715 | 822/867.5125 Mhz | National Working Channel | ITAC-3 |
| 753 | 823/868.0125 Mhz | National Working Channel | ITAC-4 |

Statewide mutual aid tactical channels and recommended service are listed below:

| <u>CHAN #</u> | <u>FREQUENCY</u> | <u>DESIGNATION</u> | |
|---------------|------------------|-------------------------------|------------|
| 716 | 822/867.5375 Mhz | Tactical, Fire/EMS | STATEOPS-1 |
| 718 | 822/867.5625 Mhz | Tactical, Law Enforcement | STATEOPS-2 |
| 720 | 822/867.5875 Mhz | Tactical, Local Gov't, Others | STATEOPS-3 |
| 722 | 822/867.6125 Mhz | Tactical, Fire/EMS | STATEOPS-4 |
| 724 | 822/867.6375 Mhz | Tactical, Law Enforcement | STATEOPS-5 |

B. CRITERIA FOR INTEROPERABILITY REQUIREMENTS

1. Primary and Secondary Users

Users will be separated into the categories of primary and secondary.

Primary User:

A Primary User is an agency that operates on five or more channels or operates a trunking system.

Primary Users will be required to have the capability of operating on the National Calling Channel. Wide area coverage transmitters configured as full mobile relays may be required to be installed to maximize regional coverage along with satellite receivers, as needed, to enhance the talk-in coverage. All Primary Users in the Regional Planning Area are required to operate a control station, either individually or jointly, to provide 24 hour monitoring and rendering assistance on the Calling Channel.

All licensees are encouraged to operate additional stations on the remaining four Common Channels (Working Channels). Each Primary User may be required to sponsor, individually or jointly, one or more existing or additional mobile relays on the five Common Channels in order to provide a number of working channels in an area. The frequency, placement, and coverage of these systems will be controlled by the Regional Review Committee. The suggested guidelines for the number of required Common Channels is one Common Channel for each four trunking channels.

Secondary User:

A Secondary User is an agency that will operate a non-trunking system on four channels or less. Secondary Users include any Federal, State or Local disaster management agencies, police, fire, and providers of basic and advanced life support services.

All Secondary Users shall, as a minimum, operate a control station (if a mobile relay is providing coverage to the Secondary Users area) or a base station (half duplex is encouraged in order to communicate with portables and mobiles programmed for repeater operation) for continuous monitoring of the National Calling Channel. A Secondary User whose area is encompassed by one or more Primary Users may apply for a waiver from the Regional Review Committee for full time monitoring of the National Calling Channel. A Secondary User that has successfully petitioned for a monitoring waiver will be required to have an installed and operational control station on the National Calling Channel.

Other public safety users such as, school buses, volunteer emergency corps, Red Cross, Radio Amateur Civil Emergency Service (RACES), Amateur Radio Emergency Services (ARES), Salvation Army, C.A.P., etc., are encouraged to participate in the use of these interoperability channels. These agencies may also choose to monitor the National Calling Channel (ICALL) but will not be required to do so.

2. Shared Trunking System:

In the case of two or more agencies agreeing to share a trunking system; they must, as a group, meet all the above requirements of a Primary User. Each individual agency must, at a minimum, meet the Secondary User requirements.

3. Channel Counting:

These rules apply to the use of the 821-824/866-869 Mhz band. It is feasible, however, that an agency with an 800 Mhz trunking system outside this band will apply for one or more additional frequencies within the 821-824/866-869 Mhz band. For this reason the following counting rules are set forth:

All 800 Mhz trunking channels and all 800 Mhz non-trunked voice channels, whether or not in the 821-824/866-869 Mhz band, will be counted to determine if an applicant for a channel in the 821-824/866-869 Mhz band is a Primary User or a Secondary User.

All 800 Mhz trunking channels, whether used for voice only, data only or data and voice will be counted.

C. CHANNEL ASSIGNMENT**1. National Calling Channel (ICALL)**

The Calling Channel shall be used to contact other users in the Region for the purpose of requesting incident related information and assistance. If necessary, the calling party will be asked to move to one of the ITAC channels for continuing incident operations or other interoperability communication needs.

2. National Working Channels (ITAC-1 thru ITAC-4)

The remaining four Common Channels (Working Channels) are to be used primarily for coordination activity between different agencies in a mutual aid situation, or emergency activities of a single agency. Incidents requiring multi-agency participation will be coordinated over these channels by the agency controlling the incident. Individual Working Channels may be designated for use by various services on an incident basis by the controlling agency. In the event of multiple incidents requiring the use of these channels, channels shall be designated by mutual agreement between controlling agencies. In no case shall control of these channels remain with any single agency beyond the termination of the emergency.

3. State Tac Channels (STATEOPS-1 thru STATEOPS-5)

In addition to the above FCC mandated five Common Channels, five Tactical Channels will be set aside. Fixed base stations and fixed mobile relay stations are prohibited on these Tactical Channels. Temporary portable mobile relay stations with the minimum required power shall be permitted, except for Priority 4 usage.

Two channels are primarily intended for Fire/EMS use, two channels are primarily intended for Law Enforcement use, and the remaining channel is intended primarily for use by General Government and other eligibles. Agencies operating 800 Mhz mobiles and portables are encouraged to use these channels in the simplex mode for their interoperability and other "repeater talk-around" needs, as outlined in Section D.

D. CHANNEL USAGE

Plain English shall be used on all interoperability channels at all times; encrypting shall be prohibited. Units will use the unit identifiers they normally use in their own system, but will then adapt to any prescribed identifier and on-air protocols as determined by the controlling agency.

Paging, alerting, and other means of signaling on these Mutual Aid channels is prohibited.

The use of the Calling Channel for intra-system normal dispatch and routine agency operations is strictly prohibited. Normally, the five Common Channels are to be used only for activities requiring communications between agencies not sharing any other compatible communication system. Under emergency situations, one or more Working Channels may be assigned by the controlling agency for the duration of the incident.

All ten Mutual Aid channels (except as noted) are subject to a priority usage concept. These priorities are as follows:

- Priority 1:** Disaster and extreme emergency operations, for mutual aid and inter-agency communications.
- Priority 2:** Emergency or urgent operations involving imminent danger to the safety of life or property.
- Priority 3:** Special event control activities, generally of a pre-Planned nature, and generally involving joint participation of two or more agencies.
- Priority 3a:** Drills, tests, and exercises of a civil defense or disaster nature.

Priority 4: Single agency secondary communications
(Applies only to the five State OPS channels)

NOTE: Secondary communications are defined as that usage required by an extraordinary number of simultaneous incidents causing a temporary overload of an agency's normal communications system, or unusual occurrences occurring on an intermittent basis, such as being unable to use the agency's normal system and needing to communicate in a simplex (Talk-around) mode for a limited time.

E. REQUIREMENT FOR CHANNEL CAPABILITY

It is the intent of this Plan that all agencies that license frequencies from this Plan will implement, at a minimum, the following Interoperability channels in their mobile and portable radios:

ICALL, ITAC-1 thru ITAC-4 will be implemented in full repeat mode so the radio can access any of these channels if a repeater is available in the area.

STATEOPS-3 will be implemented in simplex mode on the repeater output frequency (867.5875). This will provide a common simplex communications path for any 800 Mhz radio used in the Region.

In addition to the above required channels, licensees are also encouraged to implement as many of the other State OPS channels as is reasonable for their operation. For example, a fire department may also choose to put STATEOPS-1 and STATEOPS-4 on their radios and a police department may choose STATEOPS-2 and STATEOPS-5. Additionally, agencies may choose to implement the STATEOPS channels in the full repeat mode if they also operate, or participate in the operation of, a temporary mobile repeater for unique events.

All interoperability channels shall be controlled by sub-audible tone 156.7 Hz. All interoperability repeaters shall have input and output tone of 156.7 Hz.

F. CHANNEL LOADING

Since these ten Mutual Aid channels are required for inter-agency communication during an emergency, they shall not be considered in channel loading and channel justification formulas.

APPENDIX SECTION

APPENDIX A

CHANNEL ASSIGNMENT BY NUMBER

***** Channels 601-714 are available only on a secondary use basis to *****
Canada in the Region 5 Area, 90.619(c)(3)

| CHAN | FREQUENCY | USE |
|------|-----------|--------------------------|
| 601 | 866.0125 | Mutual Aid |
| 602 | 866.0375 | Reserved for Region wide |
| 603 | 866.0500 | Reserved for Guard |
| 604 | 866.0625 | Reserved for Region wide |
| 605 | 866.0750 | Reserved for Guard |
| 606 | 866.0875 | Reserved for Region wide |
| 607 | 866.1000 | Reserved for Guard |
| 608 | 866.1125 | Reserved for Region wide |
| 609 | 866.1250 | Reserved for Guard |
| 610 | 866.1375 | Reserved for Region wide |
| 611 | 866.1500 | Reserved for Guard |
| 612 | 866.1625 | Adams |
| 612 | 866.1625 | Asotin |
| 612 | 866.1625 | Clark |
| 612 | 866.1625 | King |
| 613 | 866.1750 | Douglass |
| 613 | 866.1750 | Klickitat |
| 613 | 866.1750 | Thurston |
| 614 | 866.1875 | Clark |
| 614 | 866.1875 | Franklin |
| 614 | 866.1875 | Snohomish |
| 614 | 866.1875 | Spokane |

| CHAN | FREQUENCY | USE |
|-------|-----------|--------------|
| ----- | ----- | ----- |
| 615 | 866.2000 | Wahkiakum |
| 616 | 866.2125 | Benton |
| 616 | 866.2125 | Columbia |
| 616 | 866.2125 | King |
| 616 | 866.2125 | Skamania |
| 616 | 866.2125 | Spokane |
| 617 | 866.2250 | Pacific |
| 618 | 866.2375 | King |
| 618 | 866.2375 | Spokane |
| 618 | 866.2375 | Walla Walla |
| 619 | 866.2500 | Cowlitz |
| 620 | 866.2625 | Garfield |
| 620 | 866.2625 | Grays Harbor |
| 620 | 866.2625 | Lincoln |
| 620 | 866.2625 | Snohomish |
| 620 | 866.2625 | Yakima |
| 621 | 866.2750 | Unassigned |
| 622 | 866.2875 | Grant |
| 622 | 866.2875 | King |
| 622 | 866.2875 | Whitman |
| 623 | 866.3000 | Lewis |
| 624 | 866.3125 | Chelan |
| 624 | 866.3125 | Seattle |
| 625 | 866.3250 | Unassigned |
| 626 | 866.3375 | Kittitas |
| 626 | 866.3375 | Seattle |
| 627 | 866.3500 | Unassigned |
| 628 | 866.3625 | Seattle |
| 628 | 866.3625 | Yakima |

| CHAN | FREQUENCY | USE |
|-------|-----------|--------------------------|
| ----- | ----- | ----- |
| 629 | 866.3750 | Unassigned |
| 630 | 866.3875 | Seattle |
| 631 | 866.4000 | Unassigned |
| 632 | 866.4125 | Clark |
| 632 | 866.4125 | King |
| 633 | 866.4250 | Thurston |
| 634 | 866.4375 | Clark |
| 634 | 866.4375 | King |
| 634 | 866.4375 | Spokane |
| 635 | 866.4500 | Unassigned |
| 636 | 866.4625 | Benton |
| 636 | 866.4625 | King |
| 636 | 866.4625 | Spokane |
| 637 | 866.4750 | Unassigned |
| 638 | 866.4875 | Pierce |
| 638 | 866.4875 | Spokane |
| 639 | 866.5125 | Mutual Aid |
| 640 | 866.5375 | Reserved for Region wide |
| 641 | 866.5500 | Reserved for Guard |
| 642 | 866.5625 | Reserved for Region wide |
| 643 | 866.5750 | Reserved for Guard |
| 644 | 866.5875 | Reserved for Region wide |
| 645 | 866.6000 | Reserved for Guard |
| 646 | 866.6125 | Reserved for Region wide |
| 647 | 866.6250 | Reserved for Guard |

| CHAN | FREQUENCY | USE |
|------|-----------|--------------------------|
| 648 | 866.6375 | Reserved for Region wide |
| 649 | 866.6500 | Reserved for Guard |
| 650 | 866.6625 | Chelan |
| 650 | 866.6625 | Cowlitz |
| 650 | 866.6625 | Lincoln |
| 650 | 866.6625 | Seattle |
| 651 | 866.6750 | Unassigned |
| 652 | 866.6875 | Grant |
| 652 | 866.6875 | Seattle |
| 653 | 866.7000 | Thurston |
| 654 | 866.7125 | Seattle |
| 654 | 866.7125 | Spokane |
| 655 | 866.7250 | Lewis |
| 656 | 866.7375 | Seattle |
| 657 | 866.7500 | Unassigned |
| 658 | 866.7625 | Pierce |
| 658 | 866.7625 | Spokane |
| 659 | 866.7750 | Snohomish |
| 660 | 866.7875 | Pierce |
| 661 | 866.8000 | Snohomish |
| 662 | 866.8125 | Pierce |
| 663 | 866.8250 | Snohomish |
| 664 | 866.8375 | Pierce |
| 665 | 866.8500 | Snohomish |
| 666 | 866.8625 | Pierce |

| CHAN | FREQUENCY | USE |
|-------|-----------|--------------------------|
| ----- | ----- | ----- |
| 667 | 866.8750 | Unassigned |
| 668 | 866.8875 | King |
| 669 | 866.9000 | Unassigned |
| 670 | 866.9125 | King |
| 671 | 866.9250 | Unassigned |
| 672 | 866.9375 | Seattle |
| 672 | 866.9375 | Yakima |
| 673 | 866.9500 | Unassigned |
| 674 | 866.9625 | Benton |
| 674 | 866.9625 | Clark |
| 674 | 866.9625 | King |
| 675 | 866.9750 | Unassigned |
| 676 | 866.9875 | King |
| 677 | 867.0125 | Mutual Aid |
| 678 | 867.0375 | Reserved for Region wide |
| 679 | 867.0500 | Reserved for Guard |
| 680 | 867.0625 | Reserved for Region wide |
| 681 | 867.0750 | Reserved for Guard |
| 682 | 867.0875 | Reserved for Region wide |
| 683 | 867.1000 | Reserved for Guard |
| 684 | 867.1125 | Reserved for Region wide |
| 685 | 867.1250 | Reserved for Guard |
| 686 | 867.1375 | Reserved for Region wide |

| CHAN | FREQUENCY | USE |
|------|-----------|--------------------|
| 687 | 867.1500 | Reserved for Guard |
| 688 | 867.1625 | Pierce |
| 689 | 867.1750 | Cowlitz |
| 689 | 867.1750 | Snohomish |
| 690 | 867.1875 | Pierce |
| 691 | 867.2000 | Snohomish |
| 692 | 867.2125 | Clark |
| 692 | 867.2125 | Pierce |
| 693 | 867.2250 | Unassigned |
| 694 | 867.2375 | Benton |
| 694 | 867.2375 | Clark |
| 694 | 867.2375 | Pierce |
| 695 | 867.2500 | Unassigned |
| 696 | 867.2625 | Pierce |
| 697 | 867.2750 | Unassigned |
| 698 | 867.2875 | King |
| 699 | 867.3000 | Unassigned |
| 700 | 867.3125 | King |
| 701 | 867.3250 | Unassigned |
| 702 | 867.3375 | King |
| 703 | 867.3500 | Unassigned |
| 704 | 867.3625 | Unassigned |
| 705 | 867.3750 | Unassigned |
| 706 | 867.3875 | Unassigned |

| CHAN | FREQUENCY | USE |
|-------|-----------|----------------------------|
| 707 | 867.4000 | Skamania |
| 708 | 867.4125 | Snohomish |
| 709 | 867.4250 | Cowlitz |
| 709 | 867.4250 | Garfield |
| 710 | 867.4375 | King |
| 710 | 867.4375 | Walla Walla |
| 711 | 867.4500 | Klickitat |
| 711 | 867.4500 | Pacific |
| 712 | 867.4625 | Clark |
| 712 | 867.4625 | Columbia |
| 712 | 867.4625 | Pierce |
| 713 | 867.4750 | Wahkiakum |
| 714 | 867.4875 | Asotin |
| 714 | 867.4875 | Benton |
| 714 | 867.4875 | Clark |
| 714 | 867.4875 | King |
| ***** | | |
| 715 | 867.5125 | Mutual Aid |
| 716 | 867.5375 | Reserved for WA Mutual Aid |
| 717 | 867.5500 | Reserved for Guard |
| 718 | 867.5625 | Reserved for WA Mutual Aid |
| 719 | 867.5750 | Reserved for Guard |
| 720 | 867.5875 | Reserved for WA Mutual Aid |
| 721 | 867.6000 | Reserved for Guard |
| 722 | 867.6125 | Reserved for WA Mutual Aid |
| 723 | 867.6250 | Reserved for Guard |

| CHAN | FREQUENCY | USE |
|------|-----------|----------------------------|
| 724 | 867.6375 | Reserved for WA Mutual Aid |
| 725 | 867.6500 | Reserved for Guard |
| 726 | 867.6625 | Kitsap |
| 726 | 867.6625 | Pend Oreille |
| 726 | 867.6625 | Whatcom |
| 727 | 867.6750 | Clallam |
| 727 | 867.6750 | Ferry |
| 728 | 867.6875 | Mason |
| 728 | 867.6875 | San Juan |
| 729 | 867.7000 | Stevens |
| 730 | 867.7125 | Island |
| 731 | 867.7250 | Okanogan |
| 732 | 867.7375 | Kitsap |
| 733 | 867.7500 | Skagit |
| 734 | 867.7625 | King |
| 735 | 867.7750 | Jefferson |
| 736 | 867.7875 | King |
| 737 | 867.8000 | Unassigned |
| 738 | 867.8125 | King |
| 739 | 867.8250 | Unassigned |
| 740 | 867.8375 | King |
| 741 | 867.8500 | Unassigned |
| 742 | 867.8625 | King |
| 743 | 867.8750 | Unassigned |

| CHAN | FREQUENCY | USE |
|-------|-----------|--------------------------|
| ----- | ----- | ----- |
| 744 | 867.8875 | King |
| 745 | 867.9000 | Unassigned |
| 746 | 867.9125 | Kitsap |
| 746 | 867.9125 | Whatcom |
| 747 | 867.9250 | Unassigned |
| 748 | 867.9375 | Snohomish |
| 749 | 867.9500 | Pierce |
| 750 | 867.9625 | Island |
| 751 | 867.9750 | Unassigned |
| 752 | 867.9875 | Pierce |
| 753 | 868.0125 | Mutual Aid |
| 754 | 868.0375 | Reserved for Region wide |
| 755 | 868.0500 | Reserved for Guard |
| 756 | 868.0625 | Reserved for Region wide |
| 757 | 868.0750 | Reserved for Guard |
| 758 | 868.0875 | Reserved for Region wide |
| 759 | 868.1000 | Reserved for Guard |
| 760 | 868.1125 | Reserved for Region wide |
| 761 | 868.1250 | Reserved for Guard |
| 762 | 868.1375 | Reserved for Region wide |
| 763 | 868.1500 | Reserved for Guard |
| 764 | 868.1625 | Unassigned |

| CHAN# | FREQUENCY | USE |
|-------|-----------|------------|
| ----- | ----- | ----- |
| 765 | 868.1750 | Seattle |
| 766 | 868.1875 | Whatcom |
| 767 | 868.2000 | King |
| 768 | 868.2125 | Unassigned |
| 769 | 868.2250 | Seattle |
| 769 | 868.2250 | Yakima |
| 770 | 868.2375 | Unassigned |
| 771 | 868.2500 | Pierce |
| 772 | 868.2625 | Unassigned |
| 773 | 868.2750 | Kitsap |
| 774 | 868.2875 | Unassigned |
| 775 | 868.3000 | Kitsap |
| 776 | 868.3125 | Unassigned |
| 777 | 868.3250 | Pierce |
| 778 | 868.3375 | Snohomish |
| 779 | 868.3500 | Pierce |
| 780 | 868.3625 | Snohomish |
| 781 | 868.3750 | Pierce |
| 781 | 868.3750 | Spokane |
| 782 | 868.3875 | Snohomish |
| 783 | 868.4000 | Pierce |
| 784 | 868.4125 | Unassigned |
| 785 | 868.4250 | Seattle |

| CHAN | FREQUENCY | USE |
|------|-----------|--------------|
| 786 | 868.4375 | Unassigned |
| 787 | 868.4500 | Seattle |
| 788 | 868.4625 | Unassigned |
| 789 | 868.4750 | Seattle |
| 789 | 868.4750 | Yakima |
| 790 | 868.4875 | Unassigned |
| 791 | 868.5000 | Pierce |
| 792 | 868.5125 | Clallam |
| 793 | 868.5250 | King |
| 794 | 868.5375 | Unassigned |
| 795 | 868.5500 | Kitsap |
| 796 | 868.5625 | Unassigned |
| 797 | 868.5750 | Lincoln |
| 797 | 868.5750 | Pierce |
| 797 | 868.5750 | Whatcom |
| 798 | 868.5875 | Snohomish |
| 799 | 868.6000 | Pierce |
| 799 | 868.6000 | Spokane |
| 800 | 868.6125 | Grays Harbor |
| 800 | 868.6125 | Snohomish |
| 801 | 868.6250 | Pierce |
| 801 | 868.6250 | Spokane |
| 802 | 868.6375 | Skagit |
| 803 | 868.6500 | Seattle |
| 803 | 868.6500 | Spokane |

| CHAN | FREQUENCY | USE |
|------|-----------|--------------|
| 804 | 868.6625 | Thurston |
| 805 | 868.6750 | Seattle |
| 806 | 868.6875 | Jefferson |
| 807 | 868.7000 | Seattle |
| 808 | 868.7125 | Island |
| 809 | 868.7250 | Seattle |
| 809 | 868.7250 | Yakima |
| 810 | 868.7375 | Mason |
| 811 | 868.7500 | Snohomish |
| 811 | 868.7500 | Yakima |
| 812 | 868.7625 | Unassigned |
| 813 | 868.7750 | Grant |
| 813 | 868.7750 | King |
| 814 | 868.7875 | Stevens |
| 815 | 868.8000 | Kitsap |
| 815 | 868.8000 | Kittitas |
| 815 | 868.8000 | Okanogan |
| 815 | 868.8000 | Whitman |
| 816 | 868.8125 | Clallam |
| 817 | 868.8250 | King |
| 817 | 868.8250 | Lincoln |
| 817 | 868.8250 | Whatcom |
| 818 | 868.8375 | Lewis |
| 819 | 868.8500 | Chelan |
| 819 | 868.8500 | Kitsap |
| 819 | 868.8500 | Spokane |
| 820 | 868.8625 | Grays Harbor |

| CHAN | FREQUENCY | USE |
|-------|-----------|--------------|
| ----- | ----- | ----- |
| 821 | 823.8750 | King |
| 821 | 823.8750 | Spokane |
| 822 | 868.8875 | Ferry |
| 822 | 868.8875 | Skagit |
| 822 | 868.8875 | Thurston |
| 823 | 868.9000 | Franklin |
| 823 | 868.9000 | King |
| 823 | 868.9000 | Spokane |
| 824 | 868.9125 | Douglass |
| 824 | 868.9125 | San Juan |
| 825 | 868.9250 | Adams |
| 825 | 868.9250 | Pend Oreille |
| 825 | 868.9250 | Snohomish |
| 825 | 868.9250 | Thurston |
| 826 | 868.9375 | Unassigned |
| 827 | 868.9500 | Unassigned |
| 828 | 868.9625 | Unassigned |
| 829 | 868.9750 | Unassigned |
| 830 | 868.9875 | Unassigned |

Maximum field strength for co-channel operation is 5.00 Dbu

Maximum field strength for Adj.-channel operation is 25.00 Dbu

Iterations required for solution = 8

Number of channels used for solution = 224

Total number of channels assigned = 212

Total number of unassigned channels = 48

Total number of reserved channels = 50

Total number of co-channels assigned = 85

Probability of interference with the nearest:

Co-channel user is between 0% and 1%.

Adj.-channel user is between 0% and 1%.

Estimated assuming a 40 Dbu signal at the boundary.

APPENDIX B

CHANNEL ASSIGNMENT BY SITE

 Channels marked with a * are secondary to Canada in the Region 5 area.

| USE ----- | CHAN ----- | FREQUENCY ----- |
|--------------|---------------|--------------------|
| Adams | 612 | 866.1625 |
| Adams | 825 | 868.9250 |
| Total: 2 | | |
| Asotin | 612 | 866.1625 |
| Asotin | 714 | 867.4875 |
| Total: 2 | | |
| Benton | 616 | 866.2125 |
| Benton | 636 | 866.4625 |
| Benton | 674 | 866.9625 |
| Benton | 694 | 867.2375 |
| Benton | 714 | 867.4875 |
| Total: 5 | | |
| Chelan | 624 | 866.3125 |
| Chelan | 650 | 866.6625 |
| Chelan | 819 | 868.8500 |
| Total: 3 | | |
| Clallam | 727 | 867.6750 |
| Clallam | 792 | 868.5125 |
| Clallam | 816 | 868.8125 |
| Total: 3 | | |
| Clark | 612 | 866.1625 |
| Clark | 614 | 866.1875 |
| Clark | 632 | 866.4125 |
| Clark | 634 | 866.4375 |
| Clark | 674 | 866.9625 |
| Clark | 692 | 867.2125 |
| Clark | 694 | 867.2375 |
| Clark | 712 | 867.4625 |

| USE ----- | CHAN ----- | FREQUENCY ----- |
|--------------|---------------|--------------------|
| Clark | 714 | 867.4875 |
| Total: 9 | | |
| Columbia | 616 | 866.2125 |
| Columbia | 712 | 867.4625 |
| Total: 2 | | |
| Cowlitz | 619 | 866.2500 |
| Cowlitz | 650 | 866.6625 |
| Cowlitz | 689 | 867.1750 |
| Cowlitz | 709 | 867.4250 |
| Total: 4 | | |
| Douglass | 613 | 866.1750 |
| Douglass | 824 | 868.9125 |
| Total: 2 | | |
| Ferry | 727 | 867.6750 |
| Ferry | 822 | 868.8875 |
| Total: 2 | | |
| Franklin | 614 | 866.1875 |
| Franklin | 823 | 868.9000 |
| Total: 2 | | |
| Garfield | 620 | 866.2625 |
| Garfield | 709 | 867.4250 |
| Total: 2 | | |
| Grant | 622 | 866.2875 |
| Grant | 652 | 866.6875 |
| Grant | 813 | 868.7750 |
| Total: 3 | | |
| Grays Harbor | 620 | 866.2625 * |
| Grays Harbor | 800 | 868.6125 |
| Grays Harbor | 820 | 868.8625 |
| Total: 3 | | |
| Island | 730 | 867.7125 |
| Island | 750 | 867.9625 |
| Island | 808 | 868.7125 |
| Total: 3 | | |

| USE | CHAN | FREQUENCY |
|-----------|-------|------------|
| ----- | ----- | ----- |
| Jefferson | 735 | 867.7750 |
| Jefferson | 806 | 868.6875 |
| Total: 2 | | |
| King | 612 | 866.1625 * |
| King | 616 | 866.2125 * |
| King | 618 | 866.2375 * |
| King | 622 | 866.2875 * |
| King | 632 | 866.4125 * |
| King | 634 | 866.4375 * |
| King | 636 | 866.4625 * |
| King | 668 | 866.8875 * |
| King | 670 | 866.9125 * |
| King | 674 | 866.9625 * |
| King | 676 | 866.9875 * |
| King | 698 | 867.2875 * |
| King | 700 | 867.3125 * |
| King | 702 | 867.3375 * |
| King | 710 | 867.4375 * |
| King | 714 | 867.4875 * |
| King | 734 | 867.7625 |
| King | 736 | 867.7875 |
| King | 738 | 867.8125 |
| King | 740 | 867.8375 |
| King | 742 | 867.8625 |
| King | 744 | 867.8875 |
| King | 767 | 868.2000 |
| King | 793 | 868.5250 |
| King | 813 | 868.7750 |
| King | 817 | 868.8250 |
| King | 821 | 823.8750 |
| King | 823 | 868.9000 |
| Total: 28 | | |
| Kitsap | 726 | 867.6625 |
| Kitsap | 732 | 867.7375 |
| Kitsap | 746 | 867.9125 |
| Kitsap | 773 | 868.2750 |
| Kitsap | 775 | 868.3000 |
| Kitsap | 795 | 868.5500 |
| Kitsap | 815 | 868.8000 |
| Kitsap | 819 | 868.8500 |
| Total: 8 | | |

| USE | CHAN | FREQUENCY |
|--------------|-------|------------|
| ----- | ----- | ----- |
| Kittitas | 626 | 866.3375 |
| Kittitas | 815 | 868.8000 |
| Total: 2 | | |
| Klickitat | 613 | 866.1750 |
| Klickitat | 711 | 867.4500 |
| Total: 2 | | |
| Lewis | 623 | 866.3000 |
| Lewis | 655 | 866.7250 |
| Lewis | 818 | 868.8375 |
| Total: 3 | | |
| Lincoln | 620 | 866.2625 |
| Lincoln | 650 | 866.6625 |
| Lincoln | 797 | 868.5750 |
| Lincoln | 817 | 868.8250 |
| Total: 4 | | |
| Mason | 728 | 867.6875 |
| Mason | 810 | 868.7375 |
| Total: 2 | | |
| Mutual Aid | 601 | 866.0125 * |
| Mutual Aid | 639 | 866.5125 * |
| Mutual Aid | 677 | 867.0125 * |
| Mutual Aid | 715 | 867.5125 |
| Mutual Aid | 753 | 868.0125 |
| Total: 5 | | |
| Okanogan | 731 | 867.7250 |
| Okanogan | 815 | 868.8000 |
| Total: 2 | | |
| Pacific | 617 | 866.2250 |
| Pacific | 711 | 867.4500 |
| Total: 2 | | |
| Pend Oreille | 726 | 867.6625 |
| Pend Oreille | 825 | 868.9250 |
| Total: 2 | | |

| USE | CHAN | FREQUENCY |
|--------------------|------|------------|
| Pierce | 638 | 866.4875 * |
| Pierce | 658 | 866.7625 * |
| Pierce | 660 | 866.7875 * |
| Pierce | 662 | 866.8125 * |
| Pierce | 664 | 866.8375 * |
| Pierce | 666 | 866.8625 * |
| Pierce | 688 | 867.1625 * |
| Pierce | 690 | 867.1875 * |
| Pierce | 692 | 867.2125 * |
| Pierce | 694 | 867.2375 * |
| Pierce | 696 | 867.2625 * |
| Pierce | 712 | 867.4625 * |
| Pierce | 749 | 867.9500 |
| Pierce | 752 | 867.9875 |
| Pierce | 771 | 868.2500 |
| Pierce | 777 | 868.3250 |
| Pierce | 779 | 868.3500 |
| Pierce | 781 | 868.3750 |
| Pierce | 783 | 868.4000 |
| Pierce | 791 | 868.5000 |
| Pierce | 797 | 868.5750 |
| Pierce | 799 | 868.6000 |
| Pierce | 801 | 868.6250 |
| Total: 23 | | |
| Reserved for Guard | 603 | 866.0500 * |
| Reserved for Guard | 605 | 866.0750 * |
| Reserved for Guard | 607 | 866.1000 * |
| Reserved for Guard | 609 | 866.1250 * |
| Reserved for Guard | 611 | 866.1500 * |
| Reserved for Guard | 641 | 866.5500 * |
| Reserved for Guard | 643 | 866.5750 * |
| Reserved for Guard | 645 | 866.6000 * |
| Reserved for Guard | 647 | 866.6250 * |
| Reserved for Guard | 649 | 866.6500 * |
| Reserved for Guard | 679 | 867.0500 * |
| Reserved for Guard | 681 | 867.0750 * |
| Reserved for Guard | 683 | 867.1000 * |
| Reserved for Guard | 685 | 867.1250 * |
| Reserved for Guard | 687 | 867.1500 * |
| Reserved for Guard | 717 | 867.5500 |
| Reserved for Guard | 719 | 867.5750 |
| Reserved for Guard | 721 | 867.6000 |

| USE | CHAN | FREQUENCY |
|----------------------------|-------|------------|
| ----- | ----- | ----- |
| Reserved for Guard | 723 | 867.6250 |
| Reserved for Guard | 725 | 867.6500 |
| Reserved for Guard | 755 | 868.0500 |
| Reserved for Guard | 757 | 868.0750 |
| Reserved for Guard | 759 | 868.1000 |
| Reserved for Guard | 761 | 868.1250 |
| Reserved for Guard | 763 | 868.1500 |
| Total: 25 | | |
| | | |
| Reserved for Region wide | 602 | 866.0375 * |
| Reserved for Region wide | 604 | 866.0625 * |
| Reserved for Region wide | 606 | 866.0875 * |
| Reserved for Region wide | 608 | 866.1125 * |
| Reserved for Region wide | 610 | 866.1375 * |
| Reserved for Region wide | 640 | 866.5375 * |
| Reserved for Region wide | 642 | 866.5625 * |
| Reserved for Region wide | 644 | 866.5875 * |
| Reserved for Region wide | 646 | 866.6125 * |
| Reserved for Region wide | 648 | 866.6375 * |
| Reserved for Region wide | 678 | 867.0375 * |
| Reserved for Region wide | 680 | 867.0625 * |
| Reserved for Region wide | 682 | 867.0875 * |
| Reserved for Region wide | 684 | 867.1125 * |
| Reserved for Region wide | 686 | 867.1375 * |
| Reserved for Region wide | 754 | 868.0375 |
| Reserved for Region wide | 756 | 868.0625 |
| Reserved for Region wide | 758 | 868.0875 |
| Reserved for Region wide | 760 | 868.1125 |
| Reserved for Region wide | 762 | 868.1375 |
| Total: 20 | | |
| | | |
| Reserved for WA Mutual Aid | 716 | 867.5375 |
| Reserved for WA Mutual Aid | 718 | 867.5625 |
| Reserved for WA Mutual Aid | 720 | 867.5875 |
| Reserved for WA Mutual Aid | 722 | 867.6125 |
| Reserved for WA Mutual Aid | 724 | 867.6375 |
| Total: 5 | | |
| | | |
| San Juan | 728 | 867.6875 |
| San Juan | 824 | 868.9125 |
| Total: 2 | | |

| USE | CHAN | FREQUENCY |
|-----------|------|------------|
| Seattle | 624 | 866.3125 * |
| Seattle | 626 | 866.3375 * |
| Seattle | 628 | 866.3625 * |
| Seattle | 630 | 866.3875 * |
| Seattle | 650 | 866.6625 * |
| Seattle | 652 | 866.6875 * |
| Seattle | 654 | 866.7125 * |
| Seattle | 656 | 866.7375 * |
| Seattle | 672 | 866.9375 * |
| Seattle | 765 | 868.1750 |
| Seattle | 769 | 868.2250 |
| Seattle | 785 | 868.4250 |
| Seattle | 787 | 868.4500 |
| Seattle | 789 | 868.4750 |
| Seattle | 803 | 868.6500 |
| Seattle | 805 | 868.6750 |
| Seattle | 807 | 868.7000 |
| Seattle | 809 | 868.7250 |
| Total: 18 | | |
| Skagit | 733 | 867.7500 |
| Skagit | 802 | 868.6375 |
| Skagit | 822 | 868.8875 |
| Total: 3 | | |
| Skamania | 616 | 866.2125 |
| Skamania | 707 | 867.4000 |
| Total: 2 | | |
| Snohomish | 614 | 866.1875 * |
| Snohomish | 620 | 866.2625 * |
| Snohomish | 659 | 866.7750 * |
| Snohomish | 661 | 866.8000 * |
| Snohomish | 663 | 866.8250 * |
| Snohomish | 665 | 866.8500 * |
| Snohomish | 689 | 867.1750 * |
| Snohomish | 691 | 867.2000 * |
| Snohomish | 708 | 867.4125 * |
| Snohomish | 748 | 867.9375 |
| Snohomish | 778 | 868.3375 |
| Snohomish | 780 | 868.3625 |
| Snohomish | 782 | 868.3875 |
| Snohomish | 798 | 868.5875 |

| USE | CHAN | FREQUENCY |
|------------|-------|------------|
| ----- | ----- | ----- |
| Snohomish | 800 | 868.6125 |
| Snohomish | 811 | 868.7500 |
| Snohomish | 825 | 868.9250 |
| Total: 17 | | |
| Spokane | 614 | 866.1875 |
| Spokane | 616 | 866.2125 |
| Spokane | 618 | 866.2375 |
| Spokane | 634 | 866.4375 |
| Spokane | 636 | 866.4625 |
| Spokane | 638 | 866.4875 |
| Spokane | 654 | 866.7125 |
| Spokane | 658 | 866.7625 |
| Spokane | 781 | 868.3750 |
| Spokane | 799 | 868.6000 |
| Spokane | 801 | 868.6250 |
| Spokane | 803 | 868.6500 |
| Spokane | 819 | 868.8500 |
| Spokane | 821 | 823.8750 |
| Spokane | 823 | 868.9000 |
| Total: 15 | | |
| Stevens | 729 | 867.7000 |
| Stevens | 814 | 868.7875 |
| Total: 2 | | |
| Thurston | 613 | 866.1750 * |
| Thurston | 633 | 866.4250 * |
| Thurston | 653 | 866.7000 * |
| Thurston | 804 | 868.6625 |
| Thurston | 822 | 868.8875 |
| Thurston | 825 | 868.9250 |
| Total: 6 | | |
| Unassigned | 621 | 866.2750 * |
| Unassigned | 625 | 866.3250 * |
| Unassigned | 627 | 866.3500 * |
| Unassigned | 629 | 866.3750 * |
| Unassigned | 631 | 866.4000 * |
| Unassigned | 635 | 866.4500 * |
| Unassigned | 637 | 866.4750 * |
| Unassigned | 651 | 866.6750 * |
| Unassigned | 657 | 866.7500 * |

| USE | CHAN | FREQUENCY |
|------------|------|------------|
| Unassigned | 667 | 866.8750 * |
| Unassigned | 669 | 866.9000 * |
| Unassigned | 671 | 866.9250 * |
| Unassigned | 673 | 866.9500 * |
| Unassigned | 675 | 866.9750 * |
| Unassigned | 693 | 867.2250 * |
| Unassigned | 695 | 867.2500 * |
| Unassigned | 697 | 867.2750 * |
| Unassigned | 699 | 867.3000 * |
| Unassigned | 701 | 867.3250 * |
| Unassigned | 703 | 867.3500 * |
| Unassigned | 704 | 867.3625 * |
| Unassigned | 705 | 867.3750 * |
| Unassigned | 706 | 867.3875 * |
| Unassigned | 737 | 867.8000 |
| Unassigned | 739 | 867.8250 |
| Unassigned | 741 | 867.8500 |
| Unassigned | 743 | 867.8750 |
| Unassigned | 745 | 867.9000 |
| Unassigned | 747 | 867.9250 |
| Unassigned | 751 | 867.9750 |
| Unassigned | 764 | 868.1625 |
| Unassigned | 768 | 868.2125 |
| Unassigned | 771 | 868.2375 |
| Unassigned | 772 | 868.2625 |
| Unassigned | 774 | 868.2875 |
| Unassigned | 776 | 868.3125 |
| Unassigned | 784 | 868.4125 |
| Unassigned | 786 | 868.4375 |
| Unassigned | 788 | 868.4625 |
| Unassigned | 790 | 868.4875 |
| Unassigned | 794 | 868.5375 |
| Unassigned | 796 | 868.5625 |
| Unassigned | 812 | 868.7625 |
| Unassigned | 826 | 868.9375 |
| Unassigned | 827 | 868.9500 |
| Unassigned | 828 | 868.9625 |
| Unassigned | 829 | 868.9750 |
| Unassigned | 830 | 868.9875 |
| Total: | 48 | |
| Wahkiakum | 615 | 866.2000 |
| Wahkiakum | 713 | 867.4750 |
| Total: | 2 | |

| USE | CHAN | FREQUENCY |
|-------------|-------|-----------|
| ----- | ----- | ----- |
| Walla Walla | 618 | 866.2375 |
| Walla Walla | 710 | 867.4375 |
| Total: 2 | | |
| | | |
| Whatcom | 726 | 867.6625 |
| Whatcom | 746 | 867.9125 |
| Whatcom | 766 | 868.1875 |
| Whatcom | 797 | 868.5750 |
| Whatcom | 817 | 868.8250 |
| Total: 5 | | |
| | | |
| Whitman | 622 | 866.2875 |
| Whitman | 815 | 868.8000 |
| Total: 2 | | |
| | | |
| Yakima | 620 | 866.2625 |
| Yakima | 628 | 866.3625 |
| Yakima | 672 | 866.9375 |
| Yakima | 769 | 868.2250 |
| Yakima | 789 | 868.4750 |
| Yakima | 809 | 868.7250 |
| Yakima | 811 | 868.7500 |
| Total: 7 | | |