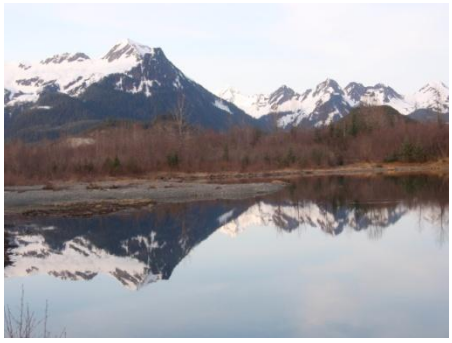
City of Cordova



ANNEX C: COMMUNICATIONS

Purpose

The purpose of this annex is to describe the communications systems currently available within the City of Cordova.

- The need to effectively communicate is of critical importance during disaster response and recovery operations.

Situation

Dispatch, located adjacent to the EOC, has VHF radio capability and is able to stay in contact with Fire/EMS and Federal, State, and local Police response units at all times. It is also able to maintain radio contact with, Public Works, Harbor, and Sewer and Water response units at all times.

Additionally, agencies within the City of Cordova listed in the following TABLE 1 have mobile and/or hand held VHF radios available for day-to-day and emergency use. They have the ability to communicate with Dispatch (and each other) in an emergency over VHF channels.

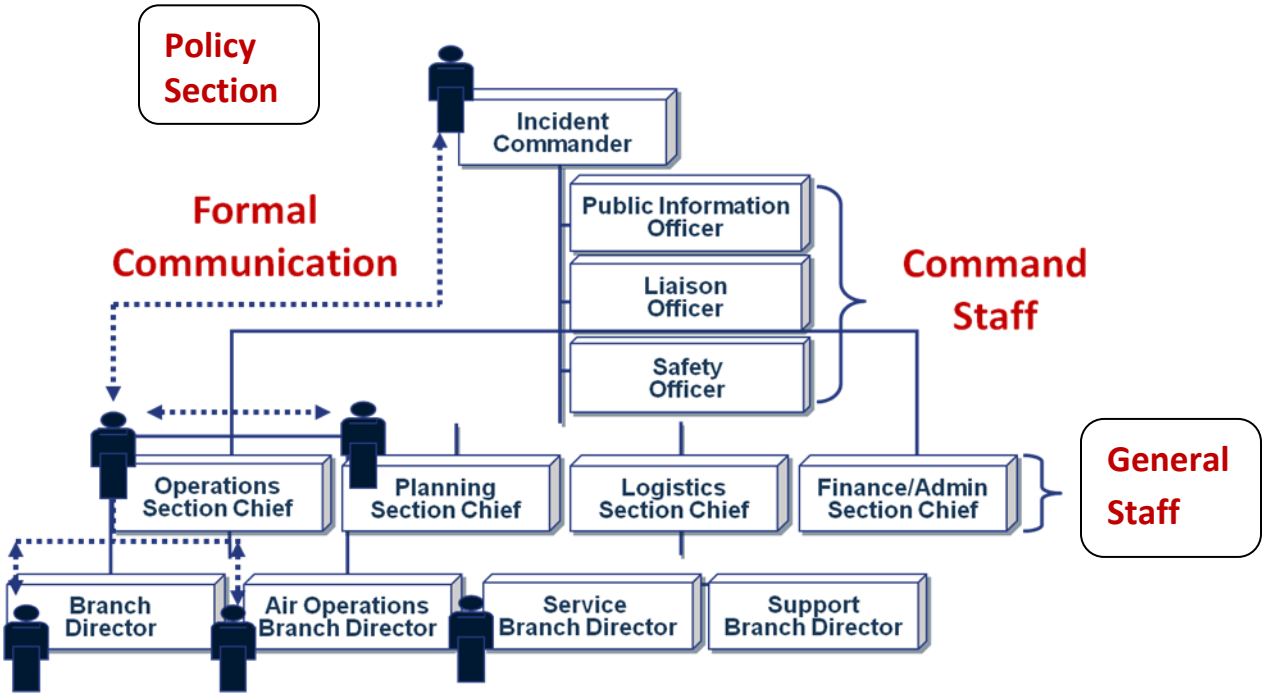
TABLE 1

Agency/ Dept./ or Neighboring Jurisdiction	Primary Communication with Dispatch …and each other	Additional Communications
US Forest Service	VHF FM and VHF	Iridium Sat Phones
AK State Troopers	VHF FM and VHF	ALMR, Iridium Sat Phones
AK Department of Fish and Game	VHF	Sat Phones and Single Sideband
Native Village of Eyak	Telephone	
Air Charter Services	VHF FM and VHF Aircraft	
Cordova Electric Cooperative	VHF	
Cordova Telephone Cooperative	Cell phones	
Cordova Community Medical Center	VHF FM and the 4 Channel Aircraft VHF	UHF and numerous FRS's
Cordova Harbor	VHF FM	
Cordova School District		UHF
US C G Sycamore	Marine VHF (channels 13, 22, and 68)	Sat phone and Voice over internet phone
US CG Air Facility	VHF	UHF, HF (receive only)
Fishing Fleet	VHF FM	Global Star System Sat Phones and some CB's
PWS Aquaculture Corporation	VHF FM	
Chenega	Telephone- Andy McLaughlin	VHF
Tatitlek	Telephone- David Totemoff Sr	VHF

Assumptions

It is assumed that during major disaster situations, normal telecommunications may be disrupted for an extended period. Ham radio or fixed, mobile and hand held radios, using frequencies assigned by the Communications Unit Leader, may be the only method of communicating. Runners and sat phones may also be utilized.

- It is assumed that all communications during an emergency will use common terminology. No 10 codes will be utilized.
- It is assumed that the Dispatch control center, response agencies and field units have available fixed, mobile or hand held radio devices to effectively communicate.
- It is further assumed that when telecommunications are functional , the line of formal communications will follow the typical ICS structure , as shown below:



Limitations

- Although the telephone (including cell and satellite phones) remains one of the most effective means of communicating information even during emergency operations, it has shortcomings. Despite technical improvements that have occurred in recent years, telephones are still subject to failure and/or system overload.

- Cordova does not currently have an Enhanced 911 system

- Dispatch has a limited number of personnel available for an extended emergency situation.

- The City is not yet ALMR capable but Cordova Post AK Wildlife Troopers are tied into ALMR through Trooper frequencies. However, some "dead zones" exist in the Cordova area. ALMR communications will soon be established in the City.

Concept of Operations

The Emergency Operations Center, located in City Hall, is the focal point for coordinating all response and recovery efforts during major disaster situations. Dispatch, located in City Hall, has VHF radio capability and is able to communicate with Fire and Police, Public Works, Harbor, and Sewer and Water response units at all times.

- Emergency communications to the state should be directed to the State Emergency Coordination Center (SECC) at 907-478-2337, the Alaska Department of Homeland Security and Emergency Management.

- Tab 1 to this Annex contains a general listing of all communication assets assigned to the various agencies within the City of Cordova. A more specific list is found in the Emergency Resource Manual.

- Amateur Radio (HAM) Operators provide valuable communications assistance during times of emergency. There is one experienced HAM operator in Cordova and 19 new operators. A listing of known amateurs in the local area is included in the Emergency Resource Manual.

- Should normal telephone and cell phone access fail, satellite phones will be used. A listing of known satellite phone numbers in Cordova is included in the Emergency Resource Manual. This list will be updated and sent to the West Coast and AK Tsunami Warning Center (907-745-4212) and the Alaska SECC (1-800-478-2337) annually, by the Emergency Management Coordinator.

- Communications with neighboring jurisdictions will be maintained through routine telephone channels, unless the emergency disrupts telecommunications. Resource lists that include backup communications for the neighboring communities of Valdez, Yakutat, Chenega Bay, and Tatitlek will be updated by the Emergency Management Coordinator annually and copies kept in the Emergency Resource Manual located in Dispatch, Cordova Volunteer Fire Department, and the Communications Unit Leader packet (found in the Logistics Brown Box).

- In addition to the above, some individual residents in the Cordova area have C.B. radios available for their personal usage. Channel 9 is the common user emergency channel.

- A volunteer senior/special needs phone tree will be established to help notify our elderly/special needs population in the event of an emergency. Family Resource Center will make the calls. That phone tree will be stored, confidentially, in Dispatch and Family Resource Center…and activated by Dispatch when appropriate. The Emergency Management Coordinator will update the phone tree each year.

- In order to stay in constant communications with the above mentioned agencies, it is essential that the Emergency Operations Center staff members have programmable, hand held radio capability available. As a minimum, radios should be assigned to the Incident Command, Operations, Planning, Logistics and Finance Sections. Additionally, each Section Chief should be assigned numerous FRS (family radio service) radios to distribute within their sections.

- Communication shortfalls with the radios will be managed in various ways, depending upon the problem. Cell phones may be used, if functioning. Sat phones may be utilized. Lastly, if everything else fails, ~20 individuals, in numerous local agencies, have been trained in HAM radio, so ARES may be utilized.

- Should the City communications systems fail, it will immediately contact the State of Alaska SECC for assistance (1-800-478-2337). The State of AK has access to the 103rd Civil Support Team, a cache of ALMR radios, and other communications resources/personnel that could be utilized.

ROLES, RESPONSIBILITIES

Radio/communication assets are purchased, maintained and assigned by the individual response agencies, i.e. Fire Department, Police Department, Public Works, etc.

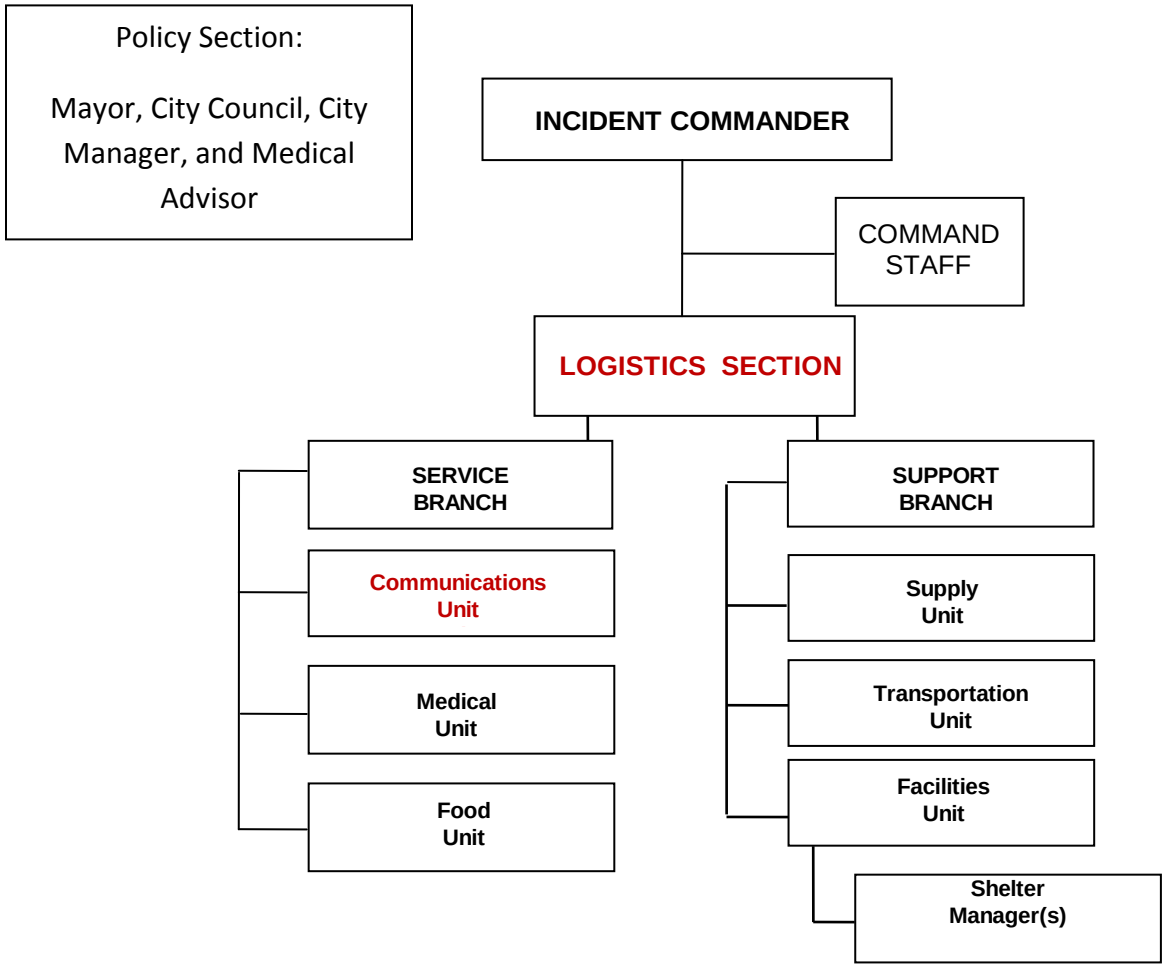
- Each organization that owns or controls radio/communication assets will provide the Emergency Management Coordinator with an updated copy of their inventory at the beginning of each fiscal year. Any significant changes that occur throughout the year will also be brought to the attention of the Coordinator. All changes will be recorded in the Emergency Resource Manual. The Coordinator is responsible for reviewing this Annex annually, and when any significant changes occur

COORDINATION

- Communications will follow the Incident Command System.
- Communications between the on-scene personnel/agencies will be via VHF channels. The specific frequencies used will be assigned by the Communications Unit Leader. Cell phones will also be used if they are functioning. Table 1 (page 75) indicates which agencies are VHF capable on City channels.
- A Mobile EOC is currently being equipped. It will have ALMR capabilities…multiple radio frequencies…cell phone and satellite phone capabilities…and HAM radio capabilities.
- Communications between the on-scene personnel and the off-site personnel/agencies (for example: CCMC, Ilanka, shelters, and the Incident Management Team) will be accomplished via VHF channels. The IMT will have at least 5 VFH FM radios…each shelter will be issued a VHF FM radio…and CCMC will use their VHF base radio. The specific frequencies used will be assigned by the Communications Unit Leader.
- Dispatch will support and coordinate the on-scene personnel/agencies via VHF FM radios…Consolette One, Consolette Two, and the 4 Channel radio.
    - Basic procedures to facilitate communications include:
        - Repeating all transmissions
        - Using military time
        - Avoiding 10 code use
        - Documenting all transmissions
        - Making sure that backup power is available and ready to support radio communications

- If radios are not functioning, Dispatch will use sat phones, FRS radios, runners , or HAM radio
- MOU's are in place with the telephone company (CTC) and the electric company (CEC) in the event that communications are disrupted. They have agreed to make City repairs a priority.
- 24 hour communications are currently provided on a daily basis.

ORGANIZATIONAL CHART FOR COMMUNICATIONS



*****PLEASE NOTE THAT the COMMUNICATIONS UNIT IS ALLOWED TO COMMUNICATE DIRECTLY WITH ALL LEVELS**

Specific responsibilities for the following jobs are found in the Responsibility Checklist. The abbreviation for each job is found in the table below.

Each Individual City Department	ICD
Communication Unit Leader (Dispatch Supervisor)	ComUL
Emergency Management Coordinator	EMC
Logistics Section Chief	LSC
Incident Command	IC

RESPONSIBILITY CHECKLIST: COMMUNICATIONS

***If it is a PRIMARY responsibility, it will be in **BOLD and <u>Underlined</u>**

Responsibility/Task	**<u>Who is Responsible?</u>**
PREPARATION	
Maintain a personnel roster for communications procedures and update annually	**<u>EMC</u>**
Roster call-out lists will be called/tested annually	**<u>DIS</u>**
Purchase, maintain, and assign communications equipment	**<u>ICD</u>**
Test communications equipment the first day of each month	**<u>ICD</u>**
Update communications equipment lists annually and forward to Emergency Management Coordinator	**<u>ICD</u>**
Update Annex C Communications annually, or when significant changes occur	**<u>EMC</u>**
Update communication information from neighboring communities annually	**<u>EMC</u>**

Maintain/update the volunteer Disaster Registry, identifying special needs citizens	**EMC**
Have vital equipment in the condition necessary for communication procedures	**ALL ENTITIES**
RESPONSE	
Make certain that a Communications Unit Leader has been assigned immediately	**LSC**
Obtain Communications Unit Leader checklist (found in Logistics Brown Box and in Dispatch) and establish emergency communication procedures immediately.	**ComUL**
Obtain supplemental staffing, as necessary	**ComUL**
Work closely with the IMT as the EOC is established	**ComUL**
Obtain briefing from the Logistics Section Chief every operational period	**ComUL**
Assign Communications Center Manager and Lead Incident Dispatcher.	**ComUL**
Assign Message Center Manager and ensure adequate staff is assigned to answer phones and attend fax machines	**ComUL**
Assign radios to appropriate recipients, making certain to photograph each individual with their radio and document each assignment, as a tracking method	**ComUL**
Evaluate safety and health (including mental health)of staff and take necessary actions	**ComUL**
RECOVERY	
Communicate final Communication Unit status to EOC and compile a final report	**ComUL**
Reassign staff, as necessary…back to normal schedule	**ICD**
Oversee the restoration of normal services	**ICD**
Restock supplies and equipment used in the event return any borrowed equipment after proper cleaning/inspection	**ComUL, ICD**
Itemize all damaged equipment and supplies and submit to Finance/Administration Section	**ComUL, ICD**
Provide appreciation and recognition to solicited and non-solicited volunteers	**ICD**
Continue to evaluate safety and health (including mental health)of staff and take necessary actions	**ICD**
Restore normal non-essential services	**ICD**
Provide a copy of all documentation to the Planning Section Chief	**ComUL**
Take actions necessary to restore public confidence	**ALL ENTITIES**

Tabs

TAB 1

ANNEX C: COMMUNICATIONS

- **The communications network of the City of Cordova is properly licensed by the FCC. The City-wide frequency used is 154.965. 154.965 is labeled Ski Sx or Fleet on all city radios. There are several other frequencies also used in Cordova on a day-to-day basis. See table below.**

	4 Channel Radio	Consolette One Ski Hill Repeater	Consolette Two Heney Ridge Repeater
Ski Hill Sx (or "Fleet") (Simplex)	154.965 MHZ	154.965 MHZ	154.965 MHZ
Ski Hill Rpt (Repeater)		154.965 /PL 123.0 158.760/PL 127.3	154.850 /PL
Heney RNG (Range)		158.760/PL 127.3 155.850	154.965/PL
PD Tactical		155.010 MHZ (scrambled)	155.010 MHZ (scrambled)
SAR		156.300 MHZ	156.300 MHZ
Marine Channel 16	156.800 MHZ	156.800 MHZ	156.800 MHZ
Marine Channel 22		157.010 MHZ	157.010 MHZ
Marine Channel 68	156.425 MHZ	156.425 MHZ	156.425 MHZ
Public Works	155.745 MHZ		

The City also has several radio base stations

(These units are not in vehicles, nor handheld. They are 12 V radios with 110 power supply power to the wall):

A. Public Safety Dispatch (will be the primary EOC unit)

B. Director of Public Works Office

C. Public Works Shop (Whitshed Road)

D. Harbormaster's office (Nicholoff Way) VHF FM hard wire

E. Cordova Community Medical Center (Chase Avenue)

A. Public Safety Dispatch (primary EOC unit):

This unit is located in the City Hall building, and is equipped with automatic auxiliary power. It is manned 24 hours/day by the Police Department staff. The 911 phone system is a 2-wire rotary trunk system. From that, police, fire and rescue are paged by an encoder in dispatch. Should the encoder fail, the dispatcher can activate pagers from Fire Department Engine #2 which is located 50 feet away. In addition, the hospital (also equipped with automatic auxiliary power) has a pager encoder which they can use for paging Fire/EMS and hospital staff. It could be used to alert Fire/EMS personnel, if necessary. In addition to the 911 phone lines, Dispatch receives calls via regular business lines. There are four 911 lines incoming to Dispatch, as well as 5 regular lines.

Dispatch monitors numerous radio frequencies on three separate units: Consolette One, Consolette Two, and the 4 Channel Radio. The Ski Hill Sx frequency is what all city radios use daily and is the frequency used for paging. A separate radio also monitors Forest Service radio traffic.

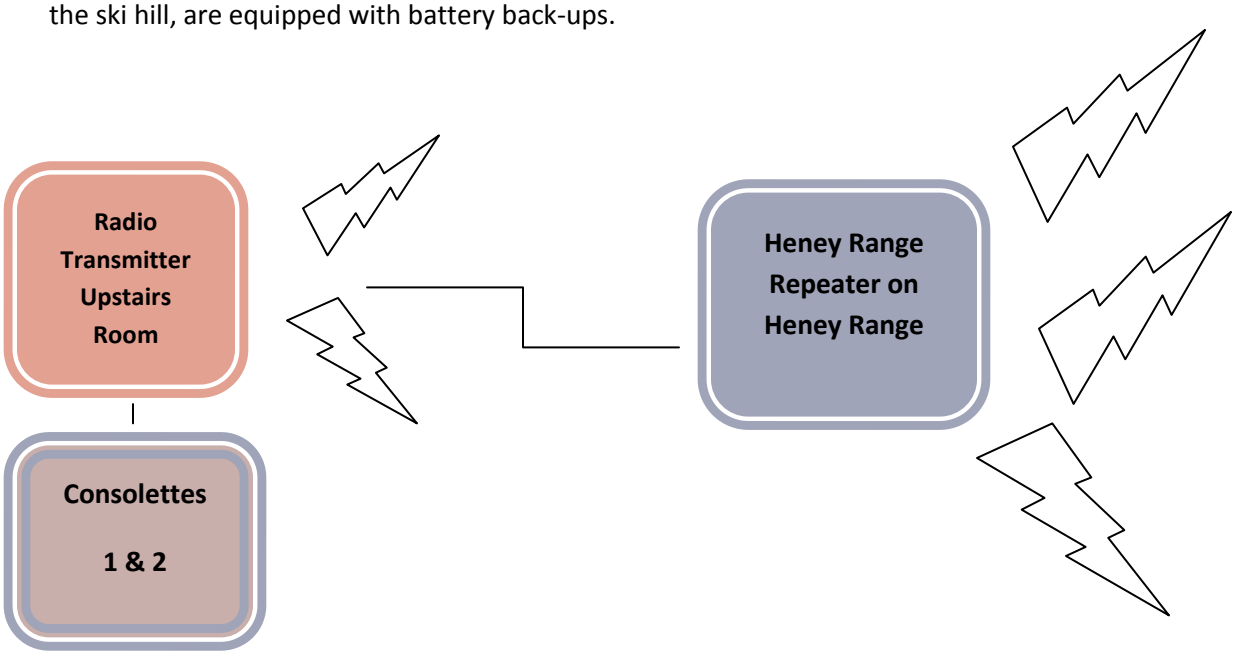
The National Warning System (NAWAS) radio/phone is also located in Dispatch. Dispatch is notified of national or statewide emergencies, from nuclear attack to earthquakes and tsunamis, on that radio.

*****In the event of a tsunami,** Dispatch will move to the CTC or USFS building and operate there.

How the DISPATCH radios works: The radio console in Dispatch is a remote set.

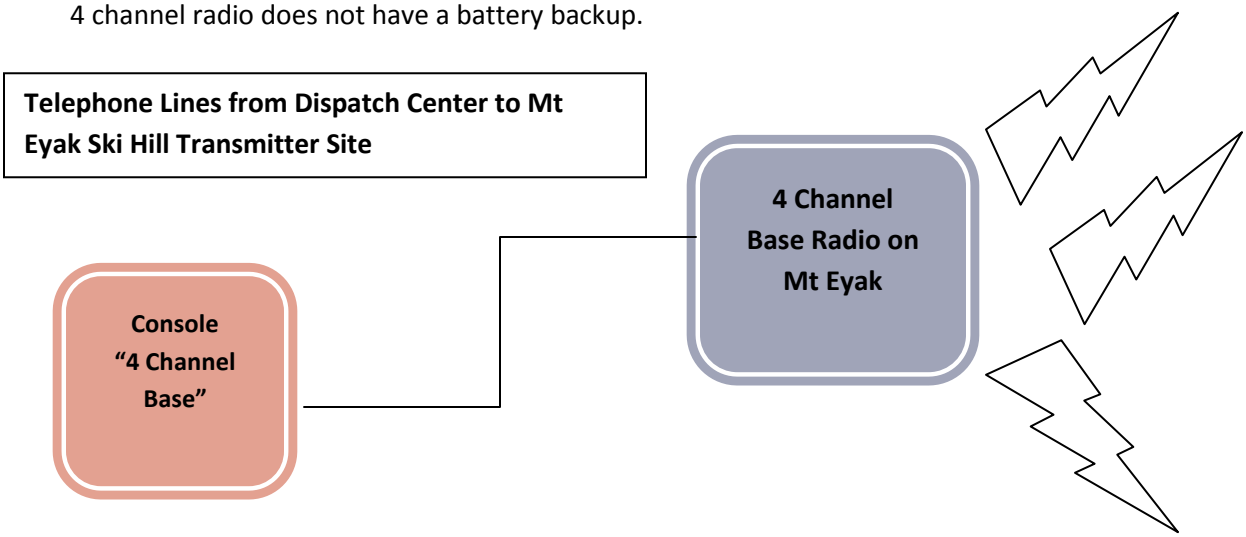
How the Consolettes Work:

The actual transmitter for Consolette 1 and Consolette 2 is located in a store room upstairs in City Hall. From there the signal is transmitted via antenna to a repeater on the Ski Hill (1220') for increased range. The Consolette repeater transmitters, located in buildings on the ski hill, are equipped with battery back-ups.



How the 4 Channel Works:

The signal from the Dispatch 4 channel radio is VHF, carried to the transmitter on the ski hill via phone cable. Power to the transmitter is via power line from the base of the ski hill. The 4 channel radio does not have a battery backup.



B. Director of Public Works Office:

Located on the second floor of the City Hall building, this base radio is equipped with an 8-channel, 45 watt radio transmitter (not remotely connected with a distant transmitter). The radio is primarily used for routine Public Works functions. The frequencies contained are all of the city channels as well as 3 marine channels (16, 68 and 22).

C. Public Works Shop:

It is located on Whitshed Road and is equipped with an 8-channel, 45 watt radio identical to the one in the Public Works Office.

D. Harbormaster's Office:

Located on Nicholoff Way is equipped with one base radio transmitter. The Motorola (which also contains marine 16 & 68) contains the Ski Hill Sx and the Public Works working channel. It is a VHF marine radio, hard mounted.

E. Cordova Community Medical Center:

It is located on Chase Avenue and is equipped with a base radio transmitter with the Ski Hill Sx frequency and a pager encoder. CCMC also uses cell phones to communicate with personnel.

Additionally there are other base stations in Cordova:

A. **Cordova Telephone Co-Op (alternate EOC)**

It is located on 2nd Street. A cabinet in the CTC meeting room contains a NAWAS phone, regular phone (emergency and city phone numbers can be switched to this location in a few minutes).Additionally, antenna cables and radio transmit lines are located there for attaching a radio. The remote radio unit in dispatch should be transported to the EOC in the event of an emergency.

B. USFS (alternate EOC) It is located on 2nd street

The USFS Radio system is composed of three independent systems: Anchorage, Seward, and Cordova. There are 13 repeater sites across the forest, for USFS employees. Dispatch does have capabilities to communicate with the USFS, and monitors their frequency.

C. USCG Sycamore (when in port)

It is located on the ship. They monitor marine channels 16, 21, and 13.