Manual provided by: **Nebraska Forest Service**
In cooperation with: **Nebraska Emergency Management**

2024

EMERGENCY ASSISTANCE FOR WILDFIRE CONTROL

University of Nebraska Lincoln

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Nebraska Forest Service
University of Nebraska-Lincoln

EMERGENCY ASSISTANCE FOR WILDFIRE CONTROL

INTRODUCTION

This publication has been developed by the Wildland Fire Protection Program of the Nebraska Forest Service as a description of aviation suppression resources available to the rural fire districts and the fire departments in the State of Nebraska for the control and suppression of wildfires. It can be used as a "quick reference" source for those resources available statewide. It is divided into four sections.

Section 1: Phone Directory, pages 6-8
This section contains the telephone numbers of several state, federal and private agencies with emergency suppression resources or can provide technical expertise in suppressing wildfires.

Section 2: Aerial Applicator and Foam Cache Directory, pages 9-14
This section contains the following information concerning the Nebraska Forest Service Fire Aviation Program:

- The procedures that must be used to obtain aircraft for wildfire suppression.
- The names, locations, and phone numbers of cooperating aerial applicators.
- The number and size of aircraft available.
- Instructions for the use and locations of Class A Foam.

Section 3: Local Resources, page 15
This section is reserved for the individual fire departments to record local telephone numbers or other vital information in the Quick Reference section.

Section 4: SEAT Requests, page 17-23
This section contains deployment procedures and forms you will need to follow to order a Single Engine Air Tanker (SEAT).

Take time now, **BEFORE** you need this manual, to turn to **page 16** and fill in the local telephone numbers you may need when a major wildfire strikes.

Section 5: Nebraska State Resources Available Page 24-28
This section provides background and ordering information for the WIRAT and Type 3 Incident Management Team. RESOURCES AVAILABLE TO YOU ON REQUEST

New and updated additions in 2024

Page 27 STRIKETEAM & TASKFORCES LIST -These are resources that may be requested during large incidents requiring additional resources.

Page 28 STATE PATROL TROOP MAP AND PHONE LIST

Page 29 RURAL AND PUBLIC POWER DISTRICT CONTACT LIST

Page 31-32 HOSPITALS CONTACT LIST

Page 32 (Bottom) BURN CENTERS W /CONTACT INFO

Page 33-46 Medevac Guide - This is a list of all medevac providers in Nebraska and South Dakota. Including contact numbers and ordering procedures.

Page 47-48 Medical Incident Report ICS 206WF THIS IS TO BE USED IN THE EVENT OF A MEDICAL EMERGENCY TO REPORT AND DOCUMENT CRITICAL INFORMATION THAT CAN BE PASSED ON TO DISPATCH AND NEXT LEVEL CARE PROVIDERS ALONG WITH AN ADDITIONAL NOTES PAGE.

Page 50-56 Engine Typing and stocking recommendations
Equipment lists.

Page 57-64 Risk &Complexity Assessment PMS 236
Help to determine incident complexity and potential needs.

Page 66-69 Incident Organizer
Multi-Page organizer to assist with organization, ICS and Planning of the incident.

IMPORTANT NOTICE

1. **If a wildland fire occurs in your fire district and aerial applicators are used, the following must take place:**

   * **The incident commander or designee must track the accrued expense of aircraft utilization (all aircraft used, not individually) for billing purposes.**

   * **As the cost nears $25,000, the incident commander must notify the Nebraska Emergency Management Agency (NEMA).**

   * **NEMA must have permission from the governor's office and a Governor's Emergency Declaration to expend more than $25,000.**

2. **Should your wildland fire become large enough and/or threaten a community, the incident commander can request large air tankers or National Guard helicopters by contacting NEMA directly: 877-297-2368 or 402-471-7421.**

   * **This is the fastest and only means of requesting large air tankers and/or National Guard helicopters.**

THIS MANUAL WAS PREPARED BY:

NEBRASKA FOREST SERVICE
Wildland Fire Protection Program
102 Forestry Hall, East Campus
University of Nebraska-Lincoln
Lincoln, Nebraska 68583-0815
Phone: 402-472-2944
Fax: 402-472-2964

IN COOPERATION WITH:

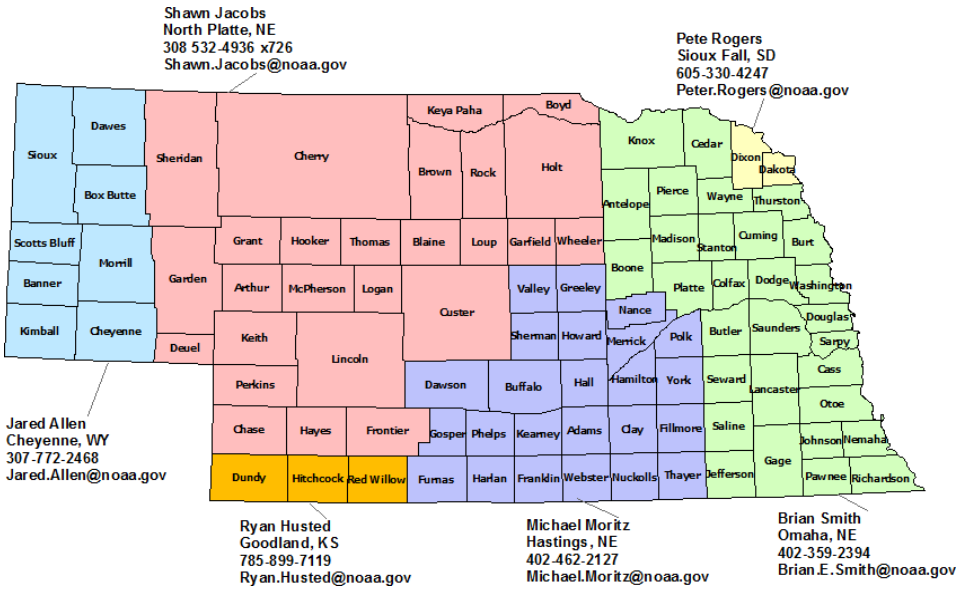
NEBRASKA EMERGENCY MANAGEMENT AGENCY

ASSISTANCE FOR MANAGING WILDFIRES	DAY PHONE	NIGHT PHONE
		(if different from DAY)
Nebraska Forest Service	402-472-2944	
Nebraska Emergency Management Agency (NEMA)	877-297-2368	402-471-7421
NEBRASKA AGENCIES		
Nebraska Emergency Management Agency (NEMA)	877-297-2368	402-471-7421
Nights, weekends, holidays		402-471-7421
Nebraska Forest Service		
• John Erixson, State Forester	402-472-6601	
• Matt Holte, Fire Management Officer	402-472-6060	307-287-9125
• Justin Nickless, Fire Management Specialist - Ainsworth	402-760-1930	402-760-1930
• Jacob Pittman ,Fire Management Specialist- Scotts Bluff	513-510-6804	308-672-5387
• Eric Moul, Fire Management Specialist – South West	308-289-9821	308-289-9821
• Lew Sieber, FEPP Manager	402-624-8061	402-499-2650
Fire Marshal	402-471-2027	
• Scott Cordes, State Fire Marshal	402-471-2027	531-893-3944
• District A - Lincoln	402-471-2590	
Jason McClun, Chief District A	402-949-0190	
• District B - Albion	402-395-2164	
• Todd Wright, Chief District B & C	308-830-1219	
• Training Division, Grand Island	308-385-6892	
• Allen Michel, Deputy State Fire marshal	308-279-1788	
State Patrol SEE MAP Page 28		
• Emergency	800-525-5555	
• HazMat Response	800-525-5555	
• Mobile Command Post	800-525-5555	
• Headquarters - Lincoln	402-471-4545	
• Troop A, Omaha	402-331-3333	
• Troop B, Norfolk	402-370-3456	
• Troop C, Grand Island	308-385-6000	
• Troop D, North Platte	308-535-8047	
• Troop E, Scottsbluff	308-632-1211	
OTHER AGENCIES		
Northern Great Plains Interagency Dispatch Center - Rapid City, SD	605-399-3160	
Rocky Mountain Area Coordination Center - Lakewood, CO	303-445-4300	
National Interagency Coordination Center - Boise, ID	208-387-5050	
RAILROADS		
Burlington-Northern Railroad - Emergency	800-832-5452	
	option 1	
Nebraska Central Railroad - Train Dispatcher - Norfolk	402-371-9015	402-379-2262
NebKota Railroad - Train Dispatcher - Chadron	308-432-2487	308-432-8378

	DAY PHONE	NIGHT PHONE
RAILROADS *(continued)*		*(if different from DAY)*
Nebraska Northwestern - Train Dispatcher - Chadron	308-432-8378	
Nebraska-Kansas-Colorado Railway - Grant	800-331-3115	
Union Pacific Railroad – Emergency/Critical call	888-877-7267	
U.S. GOVERNMENT		
National Park Service		
Midwest Regional Office - Omaha	402-661-1601	
• Herbert C. Frost Ph.D, Regional Director	402-661-1520	970-231-4725
• Jay Mickey, Deputy Regional Fire Management Officer	402-661-1764	402-250-1233
• Scott Beacham, Fire Management Specialist	402-661-1768	402-651-8789
• Patrick Pearson, Chief of Fire &aviation Midwest region	402-661-1754	402-630-0685
Agate Fossil Beds - Harrison	308-668-2211	308-436-9760
• Dan Morford ,Supt.	219-380-2817	
Homestead National Monument - Beatrice		
• Mark Engler, Supt.	402-223-3514	
Missouri National Recreational River - Crofton		
• Curt Dimmick, Supt.	605-665-0209	
Niobrara National Scenic River - Valentine		
• Susan Cook, Supt.	402-376-1901x101	605-454-5161
Scottsbluff Monument - Gering	308-436-9700	
• Dan Morford, Supt.	308-436-9711	
• Justin Cawiezel, Chief Ranger	308-436-9717	
U.S. Forest Service		
Nebraska National Forest, Forest Supervisor's Office – Chadron		
• Jack Isaacs, Forest Supervisor	308-432-0300	308-430-1379
• Brian Daunt, Fire Management Officer (Forest)	605-740-8207	605-890-2238 (c)
• Caleb Meyer, Assistant Fire Management Officer (Forest)	308-430-5043 (p)	970-756-5673(c)
Bessey Ranger District - Halsey		
• Ted Teahon, District Ranger	308-880-0540	
• Ryan Cumbow, East Zone Fire Management Officer	605-280-1001	
McKelvie Ranger District – Nenzel	308-553-2257	
Pine Ridge Ranger District - Chadron		
• Timothy Buskirk, District Ranger	308-432-6855	308-432-0393
• VACANT, Fire Management officer		
• Pete Benes, Engine Captain	402-367-2829 (c)	
U.S. Fish & Wildlife Service	605-885-6273	605-951-8690 (c)
Rainwater Basin Management	308-263-3000	
Quivira National Wildlife Refuge - Stafford, KS		
• VACANT, FMO Southern NE and Northern Kansas	620-486-2393	
Crescent Lake NWR - Ellsworth		
• Brian DeVries Refuge Manager	308-783-2477	
• Chris Masson, Fire Program Tech	308-762-4893	308-762-2028 C

	DAY PHONE	NIGHT PHONE
U.S. Fish & Wildlife Service *(continued)*		*(if different from DAY)*
Fort Niobrara NWR	402-376-3789	
Great Plains Zone FMO Colby Crawford Northern Ne, all of SD	605-885-6273	605-951-8690
VACANT Supervisory Range Tech (FIRE)	402-376-3789	402-322-0252
Valentine NWR	402-376-1889	
Lacreek NWR Todd Schmidt Refuge Manager	605-685-6508	308-760-6268
NATIONAL WEATHER SERVICE		
Western Nebraska: Cheyenne, WY	800-269-6220	
• Banner, Box Butte, Cheyenne, Dawes, Kimball, Morrill, Scotts Bluff, Sioux counties		
Southwest Nebraska: Goodland, KS	800-272-7811	
• Dundy, Hitchcock, Red Willow counties		
North Central Nebraska: North Platte, NE	800-603-3562	
• Arthur, Blaine, Brown, Boyd, Chase, Cherry, Custer, Deuel, Frontier, Garden, Garfield, Grant, Hayes, Holt, Hooker, Keith, Keya Paha, Lincoln, Logan, Loup, McPherson, Perkins, Rock, Sheridan, Thomas, Wheeler counties		
South Central Nebraska: Hastings, NE	800-528-2914	
• Adams, Buffalo, Clay, Dawson, Fillmore, Franklin, Furnas, Gosper, Greeley, Hall, Hamilton, Harlan, Howard, Kearney, Merrick, Nance, Nuckolls, Phelps, Polk, Sherman, Thayer, Valley, Webster, York counties		
Eastern Nebraska: Valley, NE	800-452-9074	
• Antelope, Boone, Burt, Butler, Cass, Cedar, Colfax, Cuming, Dodge, Douglas, Gage, Jefferson, Johnson, Knox, Lancaster, Madison, Nemaha, Otoe, Pawnee, Pierce, Platte, Richardson, Saline, Sarpy, Saunders, Seward, Stanton, Thurston, Washington, Wayne counties		
Northeast Nebraska: Sioux Falls, SD	800-852-9470	
• Dakota, Dixon counties		

National Weather Service-Nebraska County coverage and contact information



FIRE AVIATION

Several aerial applicators across Nebraska cooperate with the Nebraska Forest Service and Nebraska Emergency Management Agency to provide the aerial application of retardants to combat wildfires. The aerial applicator is an initial attack tool available to a fire department and can often get to the fire before ground crews.

Dispatching Procedure: To use aircraft, the following guidelines **will** be used:

1. **Dispatching:** The Incident Commander is authorized to dispatch one or more aerial applicators to apply fire retardant on wildfires. Aircraft can fly from an airport other than their base of operations, therefore eliminating the possibility of an aircraft closest to a wildfire not being available. In many instances, there will be an airport closer to the wildfire than there will be aircraft. Using the nearest airport will also reduce the turnaround time for each mission flown.

2. **Notification:** The local fire chief, fire department officer, the county sheriff, or the local emergency management director of the jurisdiction requesting aircraft **will call** the Nebraska Emergency Management Agency Emergency Operations Center (EOC) in Lincoln and inform them that aircraft have been re- quested. **The EOC must be notified *immediately (402-499-1219)*.** These requirements are necessary to allow for the use of the Governor's Emergency Fund to pay for the aircraft. **Failure to give proper notification and information *will* result in the local fire department paying for the aircraft.**

3. **The Nebraska Forest Service must be notified within 48 hours of the fire.**

4. **Reimbursement:** The Nebraska Emergency Management Agency (NEMA) has set the following rates:

Aircraft Load	**Rate per Flight Hour**	**Aircraft Load**	**Rate per Flight Hour**
50-150 gallons	$550.00	451-600 gallons	$2200.00
151-200 gallons	$621.50	601-800 gallons	$2420.00
201-300 gallons	$907.50	801+ gallons	$2640.00
301-450 gallons	$1980.00	***Rates Effective April 1 2022***	
ROTOR Aircraft	$1100.00		

Billing: The aerial applicator should bill the requesting agency (the local fire department) but send the statement directly to:

Matt Holte
Nebraska Forest Service, Wildland Fire Protection
P.O. Box 830815
Lincoln, NE 68583-0815

Late Bills: Bills received more than thirty (30) days after the incident will not be paid. In the event of extenuating circumstances, the applicator may pursue payment after 30 days by:

- Appearing personally at the Nebraska Forest Service office in Lincoln **and**
- Providing documentation to justify processing the late bill.

This documentation will be sent to NEMA for further action.

Billing Statement Forms may be obtained by calling the Nebraska Forest Service at 402-472-2944.

SAFETY PRECAUTIONS FOR AIRCRAFT USAGE

Pilot Discretion: The decision to fly or not to fly a wildfire mission is that of the aircraft pilot **ONLY.** If the pilot determines that the flying conditions so warrant, he/she may refuse to fly. **The pilot's decision is final.**

Air Traffic: When *multiple* aircraft are used on a fire, their activity must be coordinated. We recommend that for large fires with multiple aircraft, the fire chief appoints a person (an aircraft supervisor is recommended) to be in charge of aerial operations. This person should have radio contact with both the aircraft and fire chief. Aircraft without radios should be kept clear of congested airspace around the fire. If aircraft without radios must be utilized, a person in radio contact with the fire chief will be physically present at the landing/refill site to direct pilots to the appropriate area of the fire and establish a safe route to and from that area. It may be necessary to hold them on the ground from time to time until the airspace clears.

NOTE:
Aerial applicators will not be allowed to enter air space being utilized by air tankers under contract to Nebraska or the federal government. All aerial applicators must be removed from within ten air miles of the retardant drop area or grounded while federal air tankers are assigned to a wildfire.

TRAINING FOR AERIAL APPLICATORS

Training and/or review is available for fire departments and new/existing aerial applicators in the proper procedures for aircraft operations during a wildfire incident.

Please contact one of the individuals listed below to receive training about:

1. Fire department activities around aircraft;
2. Safety procedures used when multiple aircraft are used;
3. The establishment of a staging area for air operations;
4. Pilot flight procedures for dropping Water/Foam on a wildfire; and
5. Pilot responsibilities in conjunction with fire department operations.

This training is also offered through the State Fire Marshal's office.

Please contact the following individual regarding training or with questions:

Justin Nickless
Nebraska Forest Service
Ainsworth, NE
402-760-1930

COOPERATING AERIAL APPLICATORS

The following aerial applicators are cooperating with the Nebraska Forest Service and the Nebraska Emergency Management Agency to provide aerial fire suppression to requesting fire departments. Get to know them before you have a fire.

- Use the closest possible resource.
- If the nearest aerial applicator is unavailable, you may contact another aerial applicator within a reasonable distance of the fire.
- Make sure that you have determined the nearest airport location to the fire for use as a base of operations.
- If you are still unable to arrange for an aerial applicator to assist you with your wildfire suppression, contact the Nebraska Forest Service at 402-472-2944 during normal working hours.
- After hours, contact the Nebraska Emergency Management Agency EOC at 1-877-297-2368 or 402-471-7421.
- Advise the operator that you need assistance obtaining an aerial applicator on your wildfire.

* ***Please refer to the contact list on the following pages.***

2024 COOPERATING AERIAL APPLICATORS CONTACT LISTING

AIRCRAFT LOCATION	RESPONSE/TRAVEL AREA (counties)	BUSINESS NAME	OWNER / OPERATOR	DAY PHONE	ALTERNATE PHONE	AIRCRAFT & CAPACITY (gallons)	CLASS A FOAM	RADIO FREQUENCY
Broken Bow / Custer	ALL Nebraska Counties	**Arrow Aviation**	Casey Williams	308-440-2709	308-872-5113	N3086A – 800 N50877---500	Yes	122.925
Eaton CO.	Banner, Kimball, Cheyenne, Duell, Imperial, Dundy, Hitchcock, Red Willow	**Crop Air LLC.**	Neil Wicke	970-454-2939		N6097C-500	No	122.925
Cozad / Dawson	Dawson, Furnace, Lincoln Custer, Buffalo, Gosper	**Mid State Aviation II Inc.**	Allison Johnson	308-784-3868		N502MS – 500 N802ET---800 N502RC-500	No	122.925
Elkhorn / Douglas	ALL Nebraska Counties	**Hexagon Helicopters Inc.**	Brent Wulf	402-885-0189		N5860H---100 N566RB ---100 Helicopters Bucket Capable	No	122.925
Kearney / Buffalo	ALL Nebraska Counties	**Buffalo Air Services**	Sean Penner	308-224-6119	308-237-3700	N517SG - 500 N819AC-800	Yes	122.925
Tilden / Madison	ALL Nebraska Counties	**Wilcox Aerial Application**	Brian Wilcox	402-640-4999		N502NE – 500	YES	122.925 VTAC FOR A/G
Nebraska City	ALL Nebraska Counties	**Atlas Aviation**	Kyle Gress	402-209-1012		N247WW-180 Bell 206 Helicopter	YES	122.925
Nebraska City	ALL Nebraska Counties	**Gress Air LLC**	Kyle Gress	402-209-1012		N402GK – 400	No	122.925

(continued on other side)

AIRCRAFT LOCATION	RESPONSE/TRAVEL AREA (counties)	BUSINESS NAME	OWNER / OPERATOR	DAY PHONE	ALTERNATE PHONE	AIRCRAFT & CAPACITY (gallons)	CLASS A FOAM	RADIO FREQUENCY
Grant/Perkins	All Nebraska Counties	**Hendricks Flying Service, LLC**	Chad Hendricks	308-386-6815	308-352-2220	N602HT-630	Yes	122.925
Scotia / Greeley	All Nebraska Counties	**Wells Air Service**	Garry Wells	308-219-0096	308-245-4328	N6670K – 330 N997QC- 400	Yes	None
Alliance/Box Butte	All Nebraska counties	**Flying Rhino Ag, LLC**	Ryan Stuhlmiller	308-629-8111		N32984-525	No	122.925
Wallace / Lincoln	All Nebraska counties Considered	**Wallace Aviation Inc.**	Stuart & Lea Van Boening	308-387-4615	308-530-2945	N3630B - 400 N3629D - 400	Yes	None
Rock, CO Ne	All Nebraska Counties	**North Central Aviation**	Tom Monroe	308-322-0338		N402DG-400	Yes	122.925
Sterling, CO	ALL Nebraska Counties	**AERO SEAT**	Patrick Mertens	970-552-1941	970-571-0871	N802HM-830 N602DM- 600 N4215W- 400 N874MM-800 N349AS---800	YES	122.925
Ft. Morgan, CO	ALL Nebraska Counties	**Scott Aviation**	Kyle Scott	970-867-8414		N602BA-620	Yes	122.925

USING CLASS A FOAM RETARDANT FROM THE AIR

Mixing Directions: The recommended mix ratio for this retardant is 0.5%. If you plan to add foam, fill the aircraft tank first and then add the foam concentrate. Some individuals recommend running the recirculation pump while en route to the fire to ensure proper mixing of the concentrate in the load. The following table shows how much foam concentrate to use for some common load sizes.

LOAD SIZE	FOAM	LOAD SIZE	FOAM
50 gallons	¼ gallon	450 gallons	2 ¼ gallons
100 gallons	½ gallon	500 gallons	2 ½ gallons
150 gallons	¾ gallons	550 gallons	2 ¾ gallons
200 gallons	1 gallon	600 gallons	3 gallons
250 gallons	1 ¼ gallon	650 gallons	3 ¼ gallons
300 gallons	1½ gallons	700 gallons	3 ½ gallons
350 gallons	1 ¾ gallon	750 gallons	3 ¾ gallons
400 gallons	2 gallons	800 gallons	4 gallons

Application: Class A Foam is a short-term retardant. Apply it no more than 15 minutes in advance of the fire. As it dries, its effectiveness diminishes. On the other hand, applying it too close to the fire has some disadvantages too. These disadvantages are smoke, turbulence, and inadequate drain time. Drain time relates to the tendency of the foam to slowly drain water into the fuel it is covering. After just a few minutes of draining, the foam will thoroughly wet the fuel it has been applied to. In contrast, plain water applied from the air will only surface-coat the fuel and then run off into the soil.

Foam is applied by partially opening the quick-dump gate on the aircraft. This will string out the load and apply it in a strip about 25-50 feet wide and 1000 feet long (depending on tank size and altitude).

The optimum altitude for dropping foam is said to be 60 feet above the height of the fuels. Dropping from higher altitudes will result in lighter foam that drifts and is not wet enough. Dropping from lower altitudes results in less air in the foam mix. This will give a narrower band of "wet water" retardant and could result in "shadowing" of fuel being coated on just one side.

Coordination: Aerial retardant drops are most effective when coordinated with ground resources. Retardant drops do not put out wildfires. However, they do provide an opportunity for ground units to get in close and extinguish a fire that has been slowed and cooled by the airdrops. Communication plays a vital role in this unified effort.

For best results, fire departments and aerial applicators should meet and discuss coordination and communications in advance of the wildfire season. **If we wait until a fire is burning, there will be no opportunity for planning a coordinated effort.** Several important questions need to be answered at these meetings:

1. How will air/ground communications be handled?
2. Who will be responsible for getting foam to the loading site?
3. What do firefighters need to know about safety around the aircraft?
4. What equipment is needed to fill the aircraft?

Precautions: While the foam is far less corrosive than earlier additives, it is best to wash down the aircraft and flush the tank after using the foam. This product is a powerful wetting agent that will quickly soak through leather gloves and boots. Rubber boots and gloves are a good idea around the loading site, as are splash-proof goggles and first-aid eyewash solutions. Ground crews should also note that foam could cause slippery footing on certain surfaces.

FOAM CACHE LOCATIONS

LOCATION	CONTACT	DAY PHONE	NIGHT PHONE
			(if different from the day)
Alliance	Fire Dept.	308-762-2151	
Broken Bow	Fire Dept.	308-872-6424	
Chadron	Fire Dept.	308-432-5506	
Chappell	State Fire Marshal	308-279-1788	
Curtis	Fire Dept.	308-367-4300	
Gothenburg	Fire Dept.	308-537-3321	
Grant	Ag-Land Aviation	308-352-2220	
Holdrege	Fire Dept.	308-995-4409	
Imperial	Fire Dept.	308-882-4444	
Keystone-Lemoyne	Fire Dept.	308-726-5715	308-284-2011
North Loup	Fire Dept.	308-496-4361	
O'Neill	Fire Dept.	402-336-1955	
Oshkosh	Fire Dept.	308-772-3540	
Rushville	Fire Dept.	308-327-2401	
Scottsbluff	Airport	308-635-4941	308-631-1591
South Sioux	Sioux Air Inc.	402-494-3667	
Superior	Nuckolls Co.	402-225-2361	402-879-7522
Tekamah	Fire Dept.	402-374-2121	
Thedford	Fire Dept.	308-645-2200	
Wallace	Wallace Aviation	800-222-4662	308-387-4615

NOTE:
If you are listed as a foam location and use the 10 gallons of foam that are provided to you for use in aerial application; contact the Nebraska Forest Service Fire Shop at 402-624-8061 for replacement of that foam. We will trade empty buckets for full ones.

QUICK REFERENCE

(Fill in blanks below)

NEBRASKA FOREST SERVICE **402-472-2944**

NEBRASKA STATE PATROL **800-525-5555**

NEMA **877-297-2368 / 402-471-7421**

LOCAL EMERGENCY MANAGEMENT: _____

CLOSEST AERIAL APPLICATOR(S):

NAME OF APPLICATOR	PHONE NUMBER

NOTIFICATION CHECKLIST	PERSON NOTIFIED	DATE	TIME

Deployment Procedures for the Nebraska Single Engine Aerial Tanker (SEAT)

The Wildfire Control Act of 2013 was passed by the Nebraska Unicameral and signed into law by Governor Heineman on June 3, 2013. This law tasks the Nebraska Forest Service (NFS) and Nebraska Emergency Management Agency (NEMA) to jointly contract for and manage a single engine air tanker (SEAT) to be based in Nebraska. To ensure rapid, efficient support for active wildfire incidents, the following procedures will guide requests for the resource.

GUIDELINES

1. A SEAT is an appropriate response to wildfires/brushfires burning out of control on all rural lands and/or threatening structures.
2. Incident commanders should request the closest resource whenever possible.
3. The following information is required by **Great Plains Dispatch Center (GPC)** to initiate a SEAT dispatch. These items should be determined before initiating the request:
   a. Latitude and longitude of the fire (preferably the point of origin) and the jurisdiction, if known.
   b. Radiofrequency that will be used for air-to-ground communications (AG25, any VTAC/VFIRE designated for air-to-ground communications only).
   c. Name and location of the ground contact (individual or resource) responsible for communications and directing retardant drops. This person needs to be on the fire.
   d. Name of person relaying the request and callback number.
4. The following ICS forms will be completed by the requesting agency/fire department and returned to NEMA and NFS within **1 – 2 weeks** of the incident initiation. ***These forms are needed by the Governor's Emergency Fund for fiduciary and audit requirements.*** **If you have any questions about filling out these documents, please contact NEMA at 402-471-7421.**

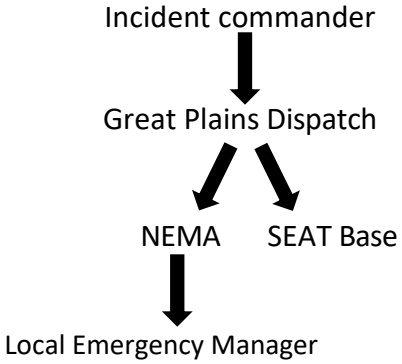
See form examples on the following pages. Forms are available electronically at nfs.unl.edu/fire-aviation.

   a. ICS 213RR Resource Request Message – page 15
   b. ICS 214 Unit Log capturing major events during aviation operations – page 16
   c. ICS 209 Incident Status Summary – pages 17-19

SEAT REQUEST PROCEDURES

To facilitate faster response and support for active wildfire incidents, beginning this year, the procedures to order a SEAT are:

1. The initial request to launch the SEAT will be made directly to GPC at **(605) 399-3160.** Ask for the **Aircraft desk.**
2. GPC will make contact with NEMA and the appropriate SEAT base to initiate the response.
3. NEMA will contact the local emergency manager.



Resource Request Message

ICS-213 RR

Requestor

1. Incident Name:	2. Date/Time:	3. Resource Request Number:

4. ORDER Note: Use additional forms when requesting different resource sources of supply

Qty.	Kind	Type	Detailed Item Description: (Vital characteristics, brand, specs, experience, size, etc.)	Arrival Date and Time Requested	Arrival Date and Time Estimated	Cost

5. Requested Delivery/Reporting Location:

6. Suitable Substitutes and/or Suggested Sources:

7. Requested by Name/Position:	8. Priority: (circle) Urgent Routine Low	9. Section Chief Approval: Date/Time:

Logistics

10. Logistics Order Number:	11. Supplier Phone/Fax/Email:
12. Name of Supplier/POC:	
13. Notes:	
14. Approval Signature of Auth Logistics Rep, Incident Commander, EOC Manager or Agency Administrator	15. Date/Time:

16. Order placed by (check box): ☐ SPUL ☐ PROC

Finance

17. Reply/Comments from Finance:	
18. Finance Section Signature:	19. Date/Time:

Requestor fills out items 1-8 and keeps green copy (top); logistics fills in remainder of item 4 and items 9-15 and keeps pink copy (bottom); finance, if needed fills out appropriate items and keeps yellow copy. Blue copy is returned to requestor, white copy goes to documentation

Please contact NEMA at 402-471-7421 with questions about this document.

UNIT/ACTIVITY LOG **ICS 214 5-94**	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

4. ORGANIZATION POSITION	5. LEADER NAME	6. OPERATIONAL PERIOD

7. PERSONNEL ROSTER ASSIGNED

NAME	ICS POSITION	HOME BASE

8. ACTIVITY LOG (CONTINUE ON REVERSE)

TIME	MAJOR EVENTS

Please contact NEMA at 402-471-7421 with questions about this document.

Incident Status Summary (ICS-209)

1: Date	2: Time	3: Initial | Update | Final	4: Incident Number	5: Incident Name

6: Incident Kind/Strategy	7: Start Date Time	8: Cause	9: Incident Commander	10: Incident Command Organization	11: State-Unit

12: County	13: Latitude and Longitude Lat: Long: Ownership at Origin:	14: Short Location Description (in reference to nearest town):

15: Size/Area Involved	16: % Contained or MMA	17: Expected Containment Date:	18: Line to Build	19: Estimated Costs to Date	20: Declared Controlled Date: Time:

21: Injuries this Reporting Period:	22: Injuries to Date:	23: Fatalities	24: Structure Information			
			Type of Structure	# Threatened	# Damaged	# Destroyed
25: Threat to Human Life/Safety: Evacuation(s) in progress ---- No evacuation(s) imminent -- Potential future threat -------- No likely threat ----------			Residence			
			Commercial Property			
			Outbuilding/Other			

26: Projected incident movement/spread in 12, 24, 48, and 72 hour time frames:

12 hours:

24 hours:

48 hours:

72 hours:

27: Values at Risk: include communities, critical infrastructure, natural and cultural resources in 12, 24, 48 and 72 hour time frames:

12 hours:

24 hours:

48 hours:

72 hours:

28: Critical Resource Needs (amount, type, kind, and number of operational periods in priority order in 12, 24, 48 and 72 hour time frames): **ex. 3 CRW1 (4); 1 HEL1 (5);**

12 hours

24 hours:

48 hours:

72 hours:

29: Major problems and concerns (control problems, social/political/economic concerns or impacts, etc.) Relate critical resources needs identified above to the Incident Action Plan.

30: Observed Weather for current operational period:
Wind Direction: Wind Speed (mph): Peak Gusts:
Max. Temperature: Min. Relative Humidity:

31: Fuels/Materials Involved: A drop down box with the 13 Fire Behavior Fuel Models has been added. The incident would select the predominant fuel model with the option to include additional fuels information in the text box.

32: Today's observed fire behavior (leave blank for non-fire events):

33: Significant events today (closures, evacuations, significant progress made, etc.):

34: Forecasted Weather for next operational period:
Wind Speed (mph): Temperature:
Wind Direction: Relative Humidity:

35: Estimated Control Date and Time:	36: Projected Final Size:	37: Estimated Final Cost:

38: Actions planned for next operational period:

39: For fire incidents, describe resistance to control in terms of:

1. Growth Potential -

2. Difficulty of Terrain -

40: Given the current constraints, when will the chosen management strategy succeed?

41: Projected demobilization start date:

42: Remarks:

43: Committed Resources

Agency	CRW1		CRW2		HEL1	HEL2	HEL3	ENGS		DOZR		WTDR	OVHD	Camp Crews	Total Personnel
	SR	ST	SR	ST	SR	SR	SR	SR	ST	SR	ST	SR	SR		
Total															

44: Cooperating and Assisting Agencies Not Listed Above:

Approval Information

45: Prepared by:	46: Approved by:	47: Sent to: By: Date: Time:

Revised 3/2009

Please contact NEMA at 402-471-7421 with questions about this Form.

Aircraft Dispatch Form

DATE:	Time:	SUNSET +30: NOT REQUIRED FROM IC	
INCIDENT NAME: (Name of Fire)			
LATITUDE:	LONGITUDE:		
GROUND CONTACT: (NAME & CALL BACK NUMBER)	A/G FREQUENCY: A/G 25 or Designated VTAC	TONE:	
HAZARDS: examples: powerlines, towers, steep terrain, wind turbines			
OTHER AIRCRAFT:			
NOTES:			

THIS FORM IS DESIGNED TO HELP GATHER THE REQUIRED INFORMATION WHEN ORDERING AVIATION FOR A FIRE. ALL THINGS LISTED ON THIS FORM ARE REQUIRED!

INCIDENT NAME: What is the name you are giving the fire.

GROUND CONTACT: The person that is going to be talking to the pilot and providing directions to the aircraft as far as tactics.

A/G FREQUENCY: Air to ground frequency used to talk to the aircraft, A/G 25 (168.75000) is the assigned frequency for Nebraska but if you don't have that ability any VTAC CHANNEL OR VFIRE CHANNEL CAN BE USED. NEED TO CONFIRM WITH AIRCRAFT WHEN ORDERING.

HAZARDS: ANYTHING that can pose a danger to flight. (Powerlines, Wind Turbines, Towers, etc.)

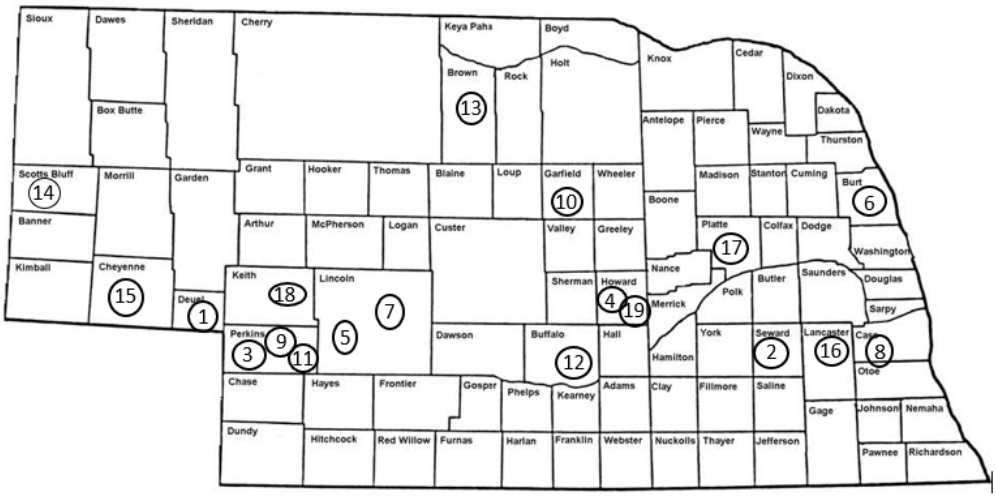
OTHER AIRCRAFT: Any aircraft you know of, other aircraft ordered for the fire, or general aviation. REPORT DRONE ACTIVITY!!!!!! NO DRONES WHEN AIRCRAFT ARE IN IN THE FIRE AREA!!!

SEE GUIDELINES OP PAGE 17

Available Nebraska State Resources

Wildland Incident Response Assistance Team

The SFMO/NFS Wildfire Incident Response Assistance Team (WIRAT) is an on-site advisory and support resource available to fire departments when an incident expands beyond the experience level and resources of the local departments. Contact a WIRAT coordinator (Allen Michel or Matt Holte) or the closest team member to your incident (contact information below) to request WIRAT assistance. Based on staff availability, 2-3 team members will deploy to the incident, with additional staff available if the incident progresses. In addition to assisting the Incident Commander, WIRAT team members may also act as a liaison to the Local Emergency Manager providing needed information for the disaster declaration process to support the deployment of additional resources.



Wildland Incident Response Assistance Team (WIRAT)

Team Member County and Contact Information

Location #1 **SFM Coordinator** Allen Michel #8602 Deuel County Work: (308)279-1788 Cell: (308) 279-1788	**Location #2** **NFS Coordinator** Matthew Holte Lancaster/Seward County Work: (402) 472-6060 Cell: (307) 287-9125
Location #3 **Training Coordinator** Fred Reichert #8723 Perkins County Work: (308) 352-8306 Cell: (308) 352-8306	**Location #4** Brian Busse #8603 Howard County Work: (402) 380-9672 Cell: (402) 380-9672
Location #5 Mark Frickel Lincoln County Work: (308) 249-6763 Cell: (308 249-6763	**Location #6** Jeff Going #8745 Burt County Work: (402) 416-1084 Cell: (402) 416-1084

Location #7 Mike Hoeft Lincoln County Work: (308) 530-9493 Cell: (308) 530-9493	**Location #8** Rayce Hoole Lancaster/Cass County Work: (531) 324-0991 Cell: (531) 324-0991
Location #9 Scott Knoles #8731 Perkins County Work: (308) 340-6730	**Location #10** Brent Lakin #8730 Garfield County Work: (308) 258-2718
Location #11 Eric Moul Red Willow/Perkins County Work: (308) 289-9821 Cell: (308) 289-9821	**Location #12** Marty Neilan #8708 Buffalo County Work: (308) 222-0154 Cell: (3080 222-0154
Location #13 Justin Nickless Brown County Work: (402) 760-1930 Cell: (402) 760-1930	**Location #14** Jacob Pittman Scottsbluff County Work: (531) 510-6804 Cell: (531) 510-6804
Location #15 Dana Reece #8721 Cheyenne County Work: (308) 249-5054	**Location #16** Clint Rossman #8727 Lancaster County Work: (402) 416-3040 Cell: (402) 416-3040
Location #17 James Sloup #8743 Platte County Work: (402) 367-8760 Cell: (402) 367-8760	**Location #18** Ryan Sylvester #8719 Keith County Work: (308) 289-5993 Cell: (308) 289-5993
Location #19 Kyle Woodgate #8720 Howard County Work: (402) 719-4447 Cell: (402) 719-4447	**Location #20**

Nebraska Type 3 Incident Management Team

The Nebraska Type 3 Incident Management team (NE-IMT3) is a higher-level resource available to departments if an incident significantly increases in complexity. A Local Disaster Declaration must be in place when making a NE-IMT3 request. The request needs to be made in coordination with the local Emergency Manager to the NEMA Watch Officer. NEMA will then deploy the team. While NE-IMT3 staff may begin to arrive on scene and assist before official team transition, the timing of the full incident transition to the NE-IMT3 will be coordinated in consultation with Incident Commander on scene.

To begin the process, contact the NEMA Watch Officer at the number below. Matt Holte (NE-IMT3 Incident Commander) or Allen Michel (Type 3 Ops Section Chief) are also available to assist (contact information below).

To Request/Activate the NE IMT3 Call:

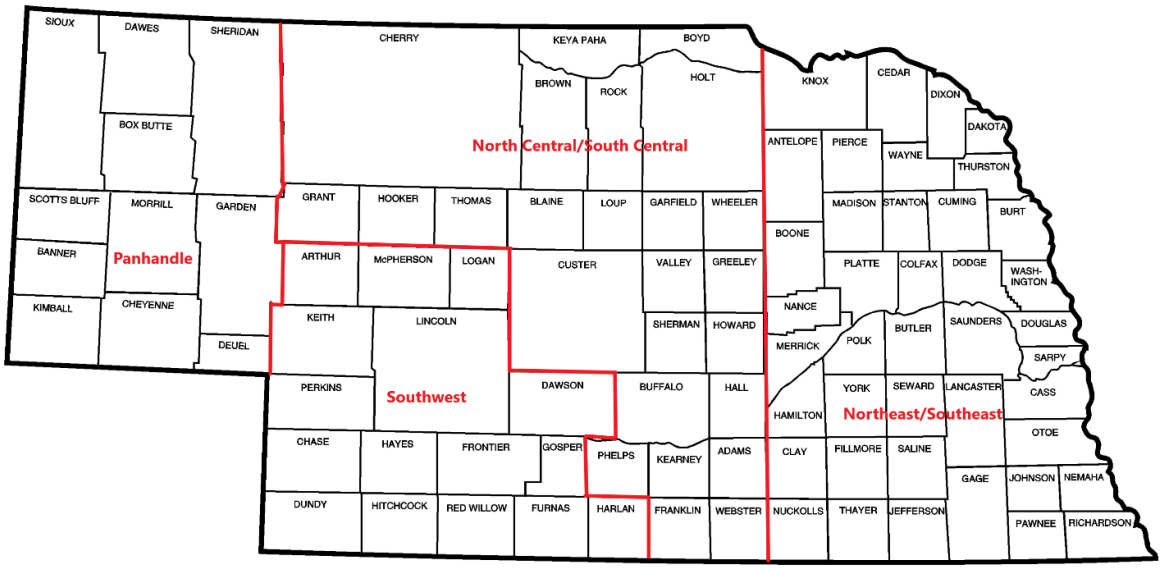
NEMA Watch officer: 24hrs. 402-499-1219	Matt Holte Nebraska Forest Service Work: 402-472-6060 Cell: 307-287-9125	Allen Michel State Fire Marshal's Office 308-279-1788 /24hrs.

Incident Management Assistance Team (IMAT)

Incidents may not rise to the need of the NE-IMT3, but the local Incident Commander may need support in various Command and General staff positions. Those specific Incident Management Assistance Team (IMAT) requests should be made thru the Local Emergency Manager to the NEMA Watch Officer.

State of Nebraska- All Hazards Incident Management Team (IMT), Type III

Nebrask Strike Teams & Task Forces



Panhandle

Pine Ridge MA Strike Team
Brian Prosser (308) 430-1958

Scotts Bluff Co. Task Force
Nathan Flower (308) 637-5135
911 Center (308) 436-5880

Southwest

Southwest MA Strike Team
Ralph Moul (308) 726-5439
Dell Simmerman (308) 289-5924

Republican Valley MA Task Force
Billie Cole (308) 340-2273

Mid-Plains MA Task Force
Lincoln Co. 911 Center (308) 535-6782

Furnas/Harlan Co. Task Force
EM Roger Powell (308) 962-6758
Bill Grossnicklaus (308) 962-4266

North Central/South Central

Hall/Howard Co. Task Force
Steve Oseka (308) 380-6200

Buffalo Co. MA Strike Team
Rick Brown (308) 708-1000

Sandhills MA Task Force
EM Alma Beland (308) 942-3461

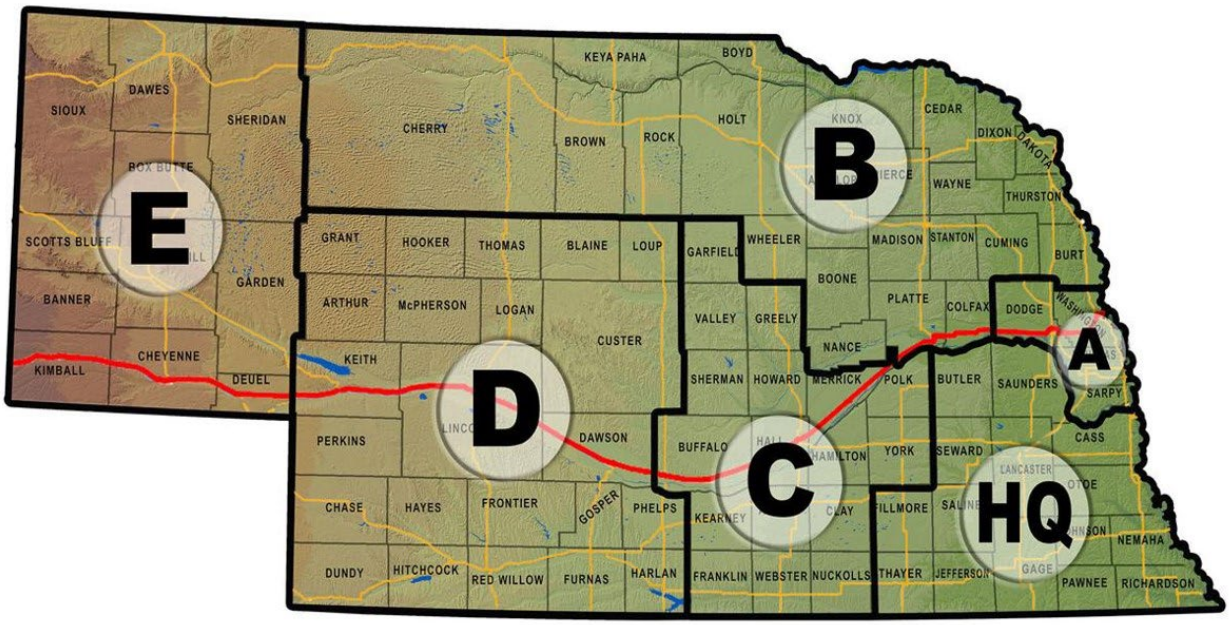
Boyd/Holt Co. Task Force
Roger Miller (402) 340-4780
Deb Hilker (402) 340-5664

KBR&C MA Task Force
EM Jess Pohzel (402) 684-9077
Brad Fiala (402) 760-1512

Northeast/Southeast

In the event of a large incident within your district. You have exceeded the capability of your mutual aid resources or believe you will do so you can request assistance from a broader scope. This list provides Strike team and Taskforce contact information established across the state. PLEASE CONSIDER THE FOLLOWING. Use closest resources first them move outward form there. Order more than you need, you can always cancel the order. If you have an established strike team or Taskforce you would like listed, please contact Eric Moul with The Nebraska Forest Service (402)-308-289-9821

NEBRASKA STATE PATROL TROOPS

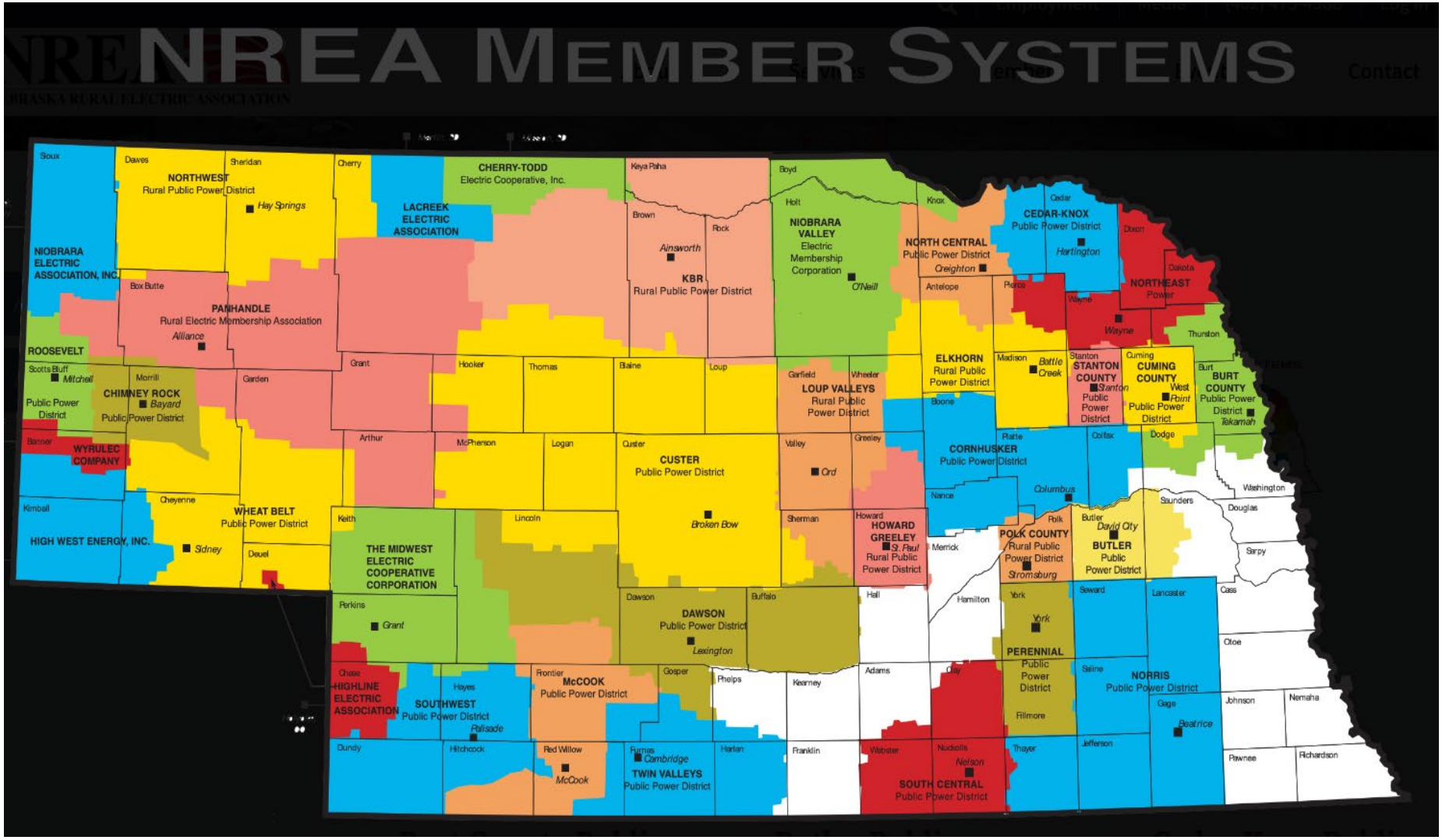


State Patrol	
• Emergency	800-525-5555
• HazMat Response	800-525-5555
• Mobile Command Post	800-525-5555
• Headquarters - Lincoln	402-471-4545
• Troop A, Omaha	402-331-3333
• Troop B, Norfolk	402-370-3456
• Troop C, Grand Island	308-385-6000
• Troop D, North Platte	308-535-8047
• Troop E, Scottsbluff	308-632-1211

RURAL & PUBLIC POWER DISTRICTS

See map page 30

Name	Phone	Contact	Email	Cell
Basin Electric Power	701-223-0441			
Burt County PPD	402-374-2631	Jon Dockhorn	jdockhorn@burtcoppd	402-870-2219
Butler PPD	402-367-2081	Mark Kirby	mkirby@butlerppd.com	402-367-3918
Cedar-Knox PPD	402-254-6291	Mike Lammers	mikel@cedarknoxppd.com	402-841-0397
Central Nebraska PP&ID	308-995-8601			
Cherry-Todd ECI	605-856-4416	Tim Grablander	timg@cherry-todd.com	
Chimney Rock PPD	308-586-1824	Alvin Harimon	alvinh@crppd.com	308-641-4569
Cornhusker PPD	402-564-2821	Clay Gibbs	clayg@cppd.us	
Cuming County PPD	402-372-2463	Chet McWhorter	cmcwhorter@ccppd.com	402-380-0146
Custer PPD	308-872-2451	Rick Nelson	rnelson@custerpower.com	308-870-5670
Dawson PPD	308-324-2386	Gwen Kautz	gkautz@dawsonpower.com	308-325-7005
Elkhorn RPPD	402-675-2185	Tom Rudloff	trudloff@erppd.com	402-360-1239
High West Energy Inc.	307-245-3261	Jared Routh	jrouth@highwestenergy.com	502-888-6260
Highline Electric Assn.	970-854-2366	Dennis Herman	dennis@hea.com	
Howard Greeley RPPD	308-754-4457	Dirk Dietz	gm@howardgreeleyppd.com	308-380-0529
KBR RPPD	402-387-1120	Bob Beatty	bobkbr@threeriver.net	402-760-3344
Lacreek Electric Assn.	605-685-6581	Josh Fanning	josh@lacreek.com	605-685-4419
Loup Valleys RPPD	308-728-3633	Ron Sandoz	ron@loupvalleyspower.com	
McCook PPD	308-345-2500	Clint Bethell	clint@mppdonline.com	308-340-7363
Midwest ECC	308-352-4356	Jayson Bishop	jbishop@midwestecc.com	308-352-8230
Nebraska Elctric G & T	402-564-8142	Darin Bloomquist	dlbloomquist@negt.coop	402-993-9933
Nebraska PPD	402-564-8561			
Nebraska REA	402-475-4988	Rick Nelson	rnelson@nrea.org	308-870-3377
Niobrara Electric	307-334-3221	Shawna Glendy	sglendy@niobrara-electric.org	307-340-1669
Niobrara Valley EMC	402-336-2803	Matt Fritz	mattf@nvemc.org	402-340-3535
Norris PPD	402-223-4038	Bruce Vitsoh	bvitosh@norrispower.com	402-806-3391
North Central PPD	402-358-5112	Doyle Hazen	doyle.hazen@ncppd.net	402-640-0504
Northeast Power	402-375-1360	Tracy Golden	tracyg@northeastpow.com	936-674-6580
Northwest RPPD	308-638-4445	Chance Briscoe	cbriscoe@nrppd.com	719-740-0442
Omaha PPD	402-636-2000			
Panhandle REMA	308-762-1311	Ryan Reiber	rreiberatprema.coop	308-760-0752
Perennial PPD	402-362-3355	Matthew Moffitt	mmoffitt@perennialpower.com	402-363-7710
Polk County RPPD	402-764-4381	Barb Fowler	bfowler@pcrppd.com	402-764-0225
Roosevelt RPPD	308-635-2424	AJ Kuxhausen	ajk@rooseveltppd.com	308-641-3728
South Central PPD	402-225-2351	Craig Cox	craig@southcentralppd.com	402-469-1078
Southern PD	308-384-2350			
Southwest PPD	308-285-3295	Colyn Suda	colyns@scppd.net	402-360-1125
Stanton County PPD	402-439-2228	Chad Waldow	cwadow@scppd.net	402-360-1125
Tri-State G & T	303-452-6111			
Twin Valleys G & T	308-697-3315	David Custer	dpcuster@twinvalleysppd	
Wheat Belt PPD	308-254-5871	Lacey Gulbranson	lacey.gulbranson@wheatbelt.com	308-430-2262
Wyrulec Company	307-837-2225	Ryan Schilreff	rschilreff@wyrulec.com	307-575-2435


NREA MEMBER SYSTEMS
NEBRASKA RURAL ELECTRIC ASSOCIATION
NORTHWEST
Rural Public Power District
Hay Springs
NIOBRARA
ELECTRIC
ASSOCIATION, INC.
PANHANDLE
Rural Electric Membership Association
Alliance
ROOSEVELT
Public Power
District
CHIMNEY ROCK
Bayard
Public Power District
WYRULEC
COMPANY
WHEAT BELT
Public Power District
Sidney
HIGH WEST ENERGY, INC.
LACREEK
ELECTRIC
ASSOCIATION
CHERRY-TODD
Electric Cooperative, Inc.
KBR
Rural Public Power District
Ainsworth
NIOBRARA
VALLEY
Electric
Membership
Corporation
O'Neill
LOUP VALLEYS
Rural Public
Power District
CUSTER
Public Power District
Broken Bow
Ord
THE MIDWEST
ELECTRIC
COOPERATIVE
CORPORATION
Grant
DAWSON
Public Power District
Lexington
HIGHLINE
ELECTRIC
ASSOCIATION
SOUTHWEST
Public Power District
Palisade
McCOOK
Public Power District
TWIN VALLEYS
Public Power District
Cambridge
McCook
NORTH CENTRAL
Public Power District
Creighton
ELKHORN
Rural Public
Power District
Battle
Creek
CEDAR-KNOX
Public Power District
Hartington
NORTHEAST
Power
Wayne
STANTON
COUNTY
Stanton
Public
Power
District
CUMING
COUNTY
West
Point
Public Power
District
BURT
COUNTY
Public Power
District
Tekamah
CORNHUSKER
Public Power District
Columbus
HOWARD
GREELEY
St. Paul
Rural Public
Power District
POLK COUNTY
Rural Public
Power District
Stromsburg
BUTLER
Public
Power District
David City
PERENNIAL
Public
Power
District
York
NORRIS
Public Power District
Beatrice
SOUTH CENTRAL
Public Power District
Nelson

HOSPITALS

Facility Name	Burn	Trauma Level	Helipad	Lat	Long	Phone
Nebraska						
CHI Health Creighton University Medical Center Bergan	NO	I	Yes			(402) 398-6353
Nebraska Medicine	NO	I	Yes			(402) 552-3997
Children's Hospital & Medical Center	NO	PII	Yes			(402) 955-7262
Bryan Medical Center West	NO	II	Yes			(402) 481-4145
CHI Health Good Samaritan Hospital	NO	II	Yes			(308) 865-7684
Regional West Medical Center	NO	II	Yes			(308) 635-3711 ext.234
Columbus Community Hospital	NO	III	Yes			(402) 564-7118
Faith Regional Health Services	NO	III	Yes			(402) 371-4880
Great Plains Regional Medical Center	NO	III	Yes			(308) 568-8000
Mary Lanning Memorial Hospital	NO	III	Yes			(402) 461-5186
CHI Health St. Elizabeth	NO	III	Yes			(402) 219-7139
CHI Health St. Francis Medical Center	NO	III	Yes			(308) 398-5652
Genoa Community Hospital	NO	IV	Yes			(402) 993-2279
CHI Health St. Mary's Community Hospital	NO	IV	Yes			(402) 873-3321
West Holt Memorial Hospital	NO	IV	Yes			(402) 925-2811
Annie Jeffrey Memorial County Health Center	NO	IV	Yes			(402) 747-2031
Aurora Memorial Hospital	NO	IV	Yes			(402) 694-3171
Avera Creighton Hospital	NO	IV	Yes			(402) 358-5700
Avera St. Anthony's Hospital	NO	IV	Yes			(402) 336-2611
Box Butte General Hospital	NO	IV	Yes			(308) 762-6660
Brown County Hospital	NO	IV	Yes			(402) 387-2800
Chadron Community Hospital	NO	IV	Yes			(308) 432-0228
Chase County Community Hospital	NO	IV	Yes			(308) 882-7111
Cherry County Hospital	NO	IV	Yes			(402) 376-2525
Community Medical Center	NO	IV	Yes			(402) 245-2428
Community Memorial Hospital	NO	IV	Yes			(402) 269-2011
Crete Area Medical Center	NO	IV	Yes			(402) 826-2101
Dundy County Hospital	NO	IV	Yes			(308) 423-2204
Gordon Memorial Hospital	NO	IV	Yes			(308) 282-0401
Gothenburg Memorial Hospital	NO	IV	Yes			(308) 537-3661
Howard County Community Hospital	NO	IV	Yes			(308) 754-4421
Jennie M. Melham Memorial Medical Center	NO	IV	Yes			(308) 872-4100

Johnson County Hospital	NO	IV	Yes			(402) 335-3361
Kimball Health Services	NO	IV	Yes			(308) 235-1973
Litzenberg Memorial County Hospital	NO	IV	Yes			(308) 946-3015
McCook Community Hospital	NO	IV	Yes			(308) 344-8544
Memorial Community Hospital	NO	IV	Yes			(402) 426-2182
Morrill County Community Hospital	NO	IV	Yes			(308) 262-1616
Nemaha County Hospital	NO	IV	Yes			(402) 274-4366
Ogallala Community Hospital	NO	IV	Yes			(308) 284-7229
Pawnee County Memorial Hospital	NO	IV	Yes			(402) 852-2231
Pender Community Hospital	NO	IV	Yes			(402) 385-3083
Perkins County Health Services	NO	IV	Yes			(308) 352-7200
Phelps Memorial Health Center	NO	IV	Yes			(308) 995-2211
Providence Medical Center	NO	IV	Yes			(402) 375-3800
Saunders Medical Center	NO	IV	Yes			(402) 443-4191
St. Francis Memorial Hospital	NO	IV	Yes			(402) 372-2404
Thayer County Health Services	NO	IV	Yes			(402) 768-7203
Tri Valley Health Systems	NO	IV	Yes			(308) 697-3329
Tri-County Hospital	NO	IV	Yes			(308) 324-5651
Valley County Hospital	NO	IV	Yes			(308) 728-3211
CHI Health St. Elizabeth **	Yes		Yes			(402) 219-7769
			Yes			
Wyoming						
Cheyenne Regional Medical Center East Campus	NO	II/III	Yes			(307)634-2273
Memorial Hospital of Converse County		IV	Yes			(307)358-2122
Wyoming Medical Center		II/III	Yes			(307)577-7201
South Dakota						
Rapid City Monument Health	NO	II	YES			(605-755-1000
Kansas						

Burn Centers

Health Care Facility	Phone Number(s)
University of Colorado Burn Center - Denver, CO	720-848-2828
Northern Colorado Medical Center - Greely, CO	970-810-4121
Nebraska Medical Center Burn Center, Omaha, NE	402-552-2876
Saint Elizabeth Regional Burn Center - Lincoln, NE	**Burn Unit 402-219-7680** Main Hospital 402-219-800
Regions Hospital - Saint Paul, MN	**Burn Unit 651-254-7042** Main Hospital 800-922-2876
Avera McKennan & University Health Center - Sioux Falls, SD	605-322-2400
Hennepin County Medical Center - Minneapolis, MN	**Burn Unit 612-873-2915** Main Hospital 612-873-3000

Medevac guide

Field Emergency Medical Evacuation (Medevac)

The intent of this plan is to establish procedures and provide guidance and support in the possibility of a medevac on an incident. When an emergency occurs requiring a medical helicopter and is within the scope of first Responder personnel, timely and effective intervention and response is needed to mitigate and reduce the severity and/or consequences of the situation.

Section 1 – Procedures: Will include procedures and responsibilities of personnel when dealing with a Medevac

Section 2 – Emergency Provider Contacts: Will consist of a list of medical facilities and emergency medical services (EMS) organizations that may be utilized during a Medevac. This list will include phone numbers, addresses, radio frequencies, and other pertinent information

Section 3 – Medical Incident Report/ICS 206 WF (Page 40)

Key Initial Steps – Stay calm, think clearly, act decisively.

1. **Call your local dispatch center via radio or phone.**
2. **Declare the nature of your emergency.**
3. **If your emergency is life-threatening, request that designated frequency be cleared for emergency traffic.**
4. **Identify the on scene point of contact or incident commander if it's an incident within an incident.**
5. **Identify your geographical location, number of patients, etc.**
6. **Provide patient assessment.**
7. **Identify any medical personnel on scene.**
8. **Identify the primary and secondary method of patient transport.**
9. **Request any additional resources and/or equipment needed.**

Section 1 – Procedures

Directly coordinate Medevac operations or field resources may coordinate directly with the local 911 dispatch center(s).

On the initial call the reporting party should:

1. Declare a MEDICAL EMERGENCY Incident. If calling in the dispatcher will request all non-emergency radio traffic be suspended. If calling into a local/county 911 dispatch center, follow their protocol as directed by the dispatcher.

2. Provide the name of the Medevac point of contact (POC). This will be the person in command of the scene and should be the only person communicating on the radio or with the radio operator.

3. The reporting person should be prepared to provide the information listed on the Medical Incident Report (8 Line). The responding office should be prepared to immediately copy the information in their CAD system or hard copy of the 8 Line. If the requesting field unit does not have a copy of the 8 Line, the responding office should be prepared to prompt the POC for the necessary information. (Local/County 911 dispatch centers may not know what an “8 Line” is)

4. Once the initial request for assistance has been made, it is vital to maintain consistency throughout the process in regard to radio communication on both ends. The office that initiates the Medevac process should continue coordination until the operation has been completed. It is important for that office to re-open radio frequencies for non-emergency traffic as soon as possible.

Medevac POC Responsibilities – Listed in order of priority:

1. Secure the scene and determine if it's safe to begin first aid.
2. Administer first aid; make assessment to determine if additional assistance is needed.
3. Call dispatch office to report incident.
4. Determine if Medevac via air and/or ground ambulance is needed.
5. If air ambulance is needed, determine the helicopter landing zone(s) and provide the latitude and longitude.
6. Begin Medical Incident Report (8 Line) and provide information as outlined in the Patient Assessment located on pg. 118 & 119 of the IRPG.
7. Provide the dispatch office with any patient updates and any changes of the status of the scene.
8. Assist EMS; be prepared to help with patient assessment and provide any background information to responding EMS personnel.
9. If the injured person is able to stand and/or walk, consider transporting them to meet the incoming EMS resource(s).

Medevac Safety

- During a helicopter Medevac, personnel assisting with the transport should maintain all helicopter safety procedures as outlined in pgs. 61-72 of the IRPG.
- When working with any of the air ambulance, personnel assisting with the transport should follow any and all directions given by the flight crew.
- When the Life Flight, or any other air ambulance lands, allow the flight crew to exit the helicopter and approach you a safe distance away from the helicopter to discuss the current situation and the process for loading the patient(s).
- If possible, the patient should be positioned with their head pointed away from the air ambulance. This will help protect the patient from any flying debris and help to reduce communication problems that occur when working in close proximity to a helicopter.

Medevac Limitations

<u>Factors that limit hoist operations:</u>

- Winds greater than 20 mph, poor visibility, and/or severe weather
- If the patient's weight is greater than 450 pounds
- Time of day (Hoist operations are not conducted at night)
- Operations that take place over water

<u>Instances where short haul operations may not be able to take place</u>

- Any unresolved communication and/or safety issues that occur
- Technical rescue operations are required to access the patient's location

- There's a potential of an avalanche at the patient's location

Helicopter Landing Zone Guidelines

- 100' x 100' area
- Approach and depart into the wind
- Area should be clear of all obstacles, trees, wires, towers, etc.
- Proper PPE should be worn at all times
- When the helicopter is landing stay with patient, remain calm, and stay alert
- After the helicopter has landed approach from the front (Make sure you can see the pilot. If you can't see them, they can't see you!)
- Wait for the flight crew to direct and assist you.
- When loading the patient(s) into the helicopter, follow the flight crew's directions
- Depart towards the front of the helicopter

T.O.M.A.S.

Terrain – Alpine, forest, slope, snow, etc. When possible, establish a nearby alternate landing area
Obstacles – Trees, cliffs, rock scree(s), loose debris, dust, wires, limited daylight, rotor wash, etc.
Method – Net, bag, litter, harness, tag line, etc. Logistics & type of insertion/extraction
Alternatives – Standby and/or assist SAR with ground rescue operations, land near victim
Safety – Team reviews available information and identifies concerns. Determines "go/no-go" decision and justifies why

Definitions

Rescue hoist: A cable winching device that's permanently mounted to the helicopter and is capable or lowering and raising a person (or persons) via a device attached to the cable.

Short haul: An insertion/extraction method designed to transport one or more persons on a fixed line (150'-250' long) beneath a helicopter. The intent is to transport persons a short distance, usually from a limited or otherwise inaccessible location to a safe landing area.

Section 2 Emergency Provider Contacts

Apollo Med Flight – CHI St. Francis (Base Location Grand Island, NE)

- **Make & Model** – Airbus EC-135
- **Performance** @ 7,000’ & 90° f – Yes
- **Cruise speed** – 140 knots
- **VFR** – Yes
- **IFR** – Yes
- **Programmable FM Radio** – Yes
  - Cannot be programmed while in flight
  - Frequency will be established based on the location of the scene at the time of dispatch
- **Night Vision Goggles** – Yes
- **Response Time** – 12 minutes or less
- **Hoist Type** – None
- **Fuel Cycle** – 3 hours, average
- **Flight Crew** – 1 pilot, 1 paramedic, 1 nurse
- **Medical Personnel** – 1 paramedic & 1 flight nurse (Both EMS licensed)
  - Can bring blood/blood products to the scene
  - Can bring point of care ultrasound
  - Capable of transporting one patients at a time
- **Ordering Procedure** – Ordered through Apollo Dispatch **833-263-3247**

Air Link - Regional West Medical Center (Base location Scottsbluff, NE)

- **Make & Model –** Bell 407GXi, (Air Link also staffs a Pilatus PC-12 at Western Nebraska Regional Airport in Scottsbluff, NE)
- **Performance @ 7,000' & 90° f –** Yes
- **Cruise speed –** 140 knots
- **VFR –** Yes –
- **IFR –** No
- **Programmable FM Radio –** Yes
    - Can be programmed while in flight
    - Frequency will be established based on the location of the scene at time of dispatch
- **Night Vision Goggles –** Yes
- **Response Time –** 10 minutes or less (depending on conditions, night vs. day, etc.)
- **Hoist Type –** None
- **Fuel Cycle –** 2 1/2 hours, average
- **Flight Crew –** 1 pilot, 2 medical crew members
- **Medical Personnel –** paramedic / nurse, nurse / nurse ,paramedic/MD, nurse/MD combination (Critical Care and Flight certified)
- **Ordering Procedure –** Ordered through GPC via radio or phone. GPC will contact Air Link Dispatch @ 1-800-252-2215
- **Hot Loading** – Yes
    - Can be performed depending on the situation, available landing zone, and experience of the personnel assisting with the Medevac.
    - **Flight following –** Monitored through Air Link Dispatch Equipped with AFF

Air Life Denver – Air Life 6 (Base location Holyoke, CO)

- **Make & Model –** Bell 407
- **Performance @ 7,000' & 90° f –** Yes
- **Cruise speed –** 140 knots
- **VFR –** Yes
- **IFR –** No
- **Programmable FM Radio –** Yes
  - Cannot be programmed while in the field, but any frequency can be added with enough heads up.
  - Frequency will be established based on the location of the scene at time of dispatch. Preference is STAC/D LZ UTAC 2 / UTAC 42D
- **Night Vision Goggles –** Yes
- **Response Time –** 10 minutes or less
- **Hoist Type –** None
- **Fuel Cycle –** 2 ½ hours, average
- **Flight Crew –** 1 pilot, 2 medical crew members
- **Medical Personnel –** 2 flight nurses or 1 paramedic & 1 flight nurse
  - Medical crew is licensed in Nebraska, South Dakota, Kansas, Wyoming and Colorado
  - Will bring blood/blood products on every call
- **Ordering Procedure**

AirLife Denver Communication Center @ 1- 303-360-3400

  - AirLife Denver Dispatch can assist in dispatching the closest appropriate air medical aircraft if Holyoke is unavailable.
  - If weather does not permit rotor wing flight, two Airlife Denver fixed wing aircraft can be dispatched from Centennial, CO.
- **Hot Loading** – Yes standard procedure
- **Flight following –** Via Sky Connect and monitored through Airlife Denver dispatch center in Aurora, CO and Operational Control Center in Englewood, CO

Not equipped with AFF

Life-Net 1-3 Columbus, NE

- **Make and Model**: Airbus EC 130 B4
- **Performance** @ 7,000’ and 90° f: Yes
- **Cruise Speed:** 115 knots
- **VFR**: Yes
- **IFR:** No
- **Programmable** FM Radio: Yes
    - Frequencies must be pre-programmed
    - Selected frequencies in central and eastern NE, including NE SRS
- **Night Vision Goggles**: Yes
- **Response Time**: 15 minutes or less
- **Hoist Type:** None
- **Fuel Cycle:** Two hours average
- **Flight Crew:** One pilot, one paramedic, one nurse
- **Medical Personnel:** One paramedic (ALS and Critical Care Qualified) and one nurse (Critical Care Qualified)
    - Blood products carried on board on every flight
    - Capable of transporting one patient at a time
- **Ordering Procedure:** Ordered through GPC via radio or phone. GPC will contact Air Methods AirCom Dispatch @ **1-844-359-9111**.
- **Hot Loading:** Not standard procedure
    - Can be performed depending on the situation, available landing zone and condition, and experience of the personnel assisting
    - Load on right side of helicopter
- **Flight Following:** Via Sky Connect and monitored through their dispatch center in Omaha, NE and Operational Control Center in Englewood, CO.
    - Not equipped with AFF

Great Plains LifeNet – Great Plains Health (Base location North Platte, NE)

- **Make & Model –** Bell 407 GX
- **Performance @ 7,000' & 90° f –** Yes
- **Cruise speed –** 140 knots
- **VFR –** Yes
- **IFR –** No
- **Programmable FM Radio –** Yes
    - Cannot be programmed while in the field
    - Frequency will be established based on the location of the scene at time of dispatch. Preference is VCAL10 or VTAC11
- **Night Vision Goggles –** Yes
- **Response Time –** 15 minutes or less
- **Hoist Type –** None
- **Fuel Cycle –** 2 ½ hours, average
- **Flight Crew –** 1 pilot, 1 paramedic, 1 nurse
- **Medical Personnel –** 1 ALS paramedic & 1 flight nurse (Critical Care qualified)
    - Medical crew is licensed in Nebraska and South Dakota
    - Can bring blood/blood products to the scene
- **Ordering Procedure –** Ordered through GPC via radio or phone or through local 911 dispatch center. GPC will contact Air Methods AirComm Dispatch @ 1-844-491-1247
    - Air Methods AirComm Dispatch can assist in dispatching other air medevac resources if needed or if LifeNet helicopter is unavailable
- **Hot Loading** – Not standard procedure
    - Can be performed depending on the situation, available landing zone, and experience of the personnel assisting with the Medevac
- **Flight following –** Via Sky Connect and monitored through their dispatch center in Omaha, NE and Operational Control Center in Englewood, CO
    - Capable of communicating on Forest Net frequencies
    - Not equipped with AFF

Life-Net 1-1 Omaha, NE

- **Make & Model –** Eurocopter EC-135 P2+
- **Performance @ 7,000' & 90° f –** Yes
- **Cruise speed –** 125 knots
- **VFR –** Yes
- **IFR –** No
- **Programmable FM Radio –** Yes
    - o Cannot be programmed in the field
    - o VMED 28 (TXT 156.7) – 155.3400
    - o ROC SRS (NE)
    - o VCALL10-VTAC14 (NE)
- **Night Vision Goggles –** Yes
- **Response Time –** 15 minutes or less
- **Hoist Type –** None
- **Fuel Cycle –** 2 ½ hours, average
- **Flight Crew –** 1 pilot, 1 paramedic, 1 nurse
- **Medical Personnel –** 1 paramedic (ALS and Critical Care Qualified) & 1 Flight Nurse (Critical Care qualified)
    - o Blood products carried on board on every flight 2-O positive and Plasma
- **Ordering Procedure –** Ordered through GPC via radio or phone. GPC will contact Air Methods AirCom Dispatch @ 1-844-359-9111
- **Hot Loading** – Yes
    - o Can be performed depending on the situation, available landing zone and condition, and experience of the personnel assisting with the Medevac.
- **Flight following –** Via Sky Connect and monitored through their dispatch center in Omaha, NE and Operational Control Center in Englewood, CO.

o Not equipped with AFF

City Life-Net Kearney, Ne

- **Make and Model** – EC135 T2+
- **Performance** @7000 & 90degrees F
- **Cruise Speed** – 150 MPH
- **VFR** – YES
- **IFR** – YES
- **Programable FM radio** – Yes
    - Cannot be programmed while in the field
    - Frequency will be established based on the location of the scene at the time of dispatch
- **Night Vision Goggles** – Yes
- **Response time** – 15 minutes or less
- **Hoist type** – None
- **Fuel Cycle** – Jet A
- **Flight crew** – 1 pilot, 1 nurse, 1 Paramedic
- **Medical Personnel** – 1 ALS paramedic and 1 flight nurse (both critical care qualified)
    - Medical crew is licensed in Nebraska
    - Carries Blood and plasma on all flights

- **Ordering procedure** – Ordered through GPC via radio or phone through local 911 dispatch center. GPC will contact AirMethods AirComm Dispatch @ **(888) 874-4356**
    - Air Methods AirComm Dispatch can assist in dispatching other air medevac resources or if LifeNet Helicopter is unavailable
- **Hot Loading –** Yes
    - Can be performed depending on the situation, available landing zone and experience of the personnel assisting with the medevac
- **Flight Following** – Via Sky Connect and monitored through their dispatch center in Omaha, NE and Operational Control Center in Englewood, Co
    - Capable of communicating on Forest Net frequencies
    - AFF not equipped

Good Samaritan Air Care – CHI Health (Base location Kearney, NE)

- **Make & Model –** Bell 429
- **Performance @ 7,000' & 90° f –** Yes
- **Cruise speed –** 150 knots
- **VFR –** Yes
- **IFR –** No
- **Programmable FM Radio –** Yes
    - Cannot be programmed while in flight
    - Frequency will be established based on the location of the scene at time of dispatch
- **Night Vision Goggles –** Yes
- **Response Time –** 12 minutes or less
- **Hoist Type –** None
- **Fuel Cycle –** 3 hours, average
- **Flight Crew –** 1 pilot, 1 paramedic, 1 nurse
- **Medical Personnel –** 1 paramedic & 1 flight nurse (Both EMS licensed)
    - Can bring blood/blood products to the scene
    - Capable of transporting one patients at a time
- **Ordering Procedure –** Ordered through GPC via radio or phone. GPC will contact Good Samaritan Communication and Transfer Center @ 1-800-474-7911
    - Good Samaritan Communication and Transfer Center can help arrange for additional aircraft response if requested
- **Hot Loading** – Not a standard procedure
    - Can be performed depending on the situation, available landing zone, and experience of the personnel assisting with the Medevac
- **Flight following –** Monitored through Good Samaritan Communication and Transfer Center
    - Not equipped with AFF

Avera Careflight (Base locations Sioux Falls, Aberdeen, and Pierre, SD)

- **Make & Model –** Airbus EC-145
- **Performance @ 7,000' & 90° f –** Yes
- **Cruise speed –** 125 knots
- **VFR –** Yes
- **IFR –** Yes
- **Programmable FM Radio –** Yes
    - Frequency will be established based on the location of the scene at time of dispatch
- **Night Vision Goggles –** Yes
- **Response Time –** 15 minutes or less
- **Hoist Type –** None
- **Fuel Cycle –** 2 ½ hours, average
- **Flight Crew –** 1 pilot, 1 paramedic, 1 nurse
- **Medical Personnel –** 1 flight paramedic & 1 flight nurse
- **Ordering Procedure –** Ordered through GPC via radio or phone. GPC will contact Careflight Dispatch @ 1-800-367-3278
- **Hot Loading** – Not standard procedure
    - Can be performed depending on the situation, available landing zone, and experience of the personnel assisting with the Medevac.
- **Flight Following –** Monitored through Midwest Careflight Dispatch
    - Not equipped with AFF

Black Hills Life Flight (Base location Rapid City, SD)

- **Make & Model –** Bell 407 GXP
- **Performance @ 7,000' & 90° f –** Yes
- **Cruise speed –** 140 knots
- **VFR –** Yes
- **IFR –** No
- **Programmable FM Radio –** Yes
    - Cannot be programmed in the field
    - VMED 28 (TXT 156.7) – 155.3400
- **Night Vision Goggles –** Yes
- **Response Time –** 15 minutes or less
- **Hoist Type –** None
- **Fuel Cycle –** 2 ½ hours, average
- **Flight Crew –** 1 pilot, 1 paramedic, 1 nurse
- **Medical Personnel –** 1 paramedic (ALS and Critical Care Qualified) & 1 Flight Nurse (Critical Care qualified)
    - Blood products carried on board on every flight O positive, O negative and Plasma
- **Ordering Procedure –** Ordered through GPC via radio or phone. GPC will contact Air Methods AirComm Dispatch @ 1-800-232-2452
- **Hot Loading** – Not standard procedure
    - Can be performed depending on the situation, available landing zone, and experience of the personnel assisting with the Medevac.
        - Typically, the pilot will do a full shutdown upon arrival
- **Flight following –** Via Sky Connect and monitored through their dispatch center in Omaha, NE and Operational Control Center in Englewood, CO.
    - Capable of communicating on Forest Net frequencies
    - Not equipped with AFF

Section 3 – Medical Incident Report/ICS 206 WF

FOR A NON-EMERGENCY INCIDENT, WORK THROUGH CHAIN OF COMMAND TO REPORT AND TRANSPORT INJURED PERSONNEL AS NECESSARY.

FOR A MEDICAL EMERGENCY: IDENTIFY ON SCENE INCIDENT COMMANDER BY NAME AND POSITION AND ANNOUNCE "MEDICAL EMERGENCY" TO INITIATE RESPONSE FROM IMT COMMUNICATIONS/DISPATCH.

Use the following items to communicate situation to communications / dispatch.

1. **CONTACT COMMUNICATIONS / DISPATCH (Verify correct frequency prior to starting report)** *Ex: "Communications, Div. Alpha. Stand-by for Emergency Traffic."*
2. **INCIDENT STATUS:** *Provide incident summary (including number of patients) and command structure.*
   Ex: "Communications, I have a Red priority patient, unconscious, struck by a falling tree. Requesting air ambulance to Forest Road 1 at (Lat./Long.) This will be the Trout Meadow Medical, IC is TFLD Jones. EMT Smith is providing medical care."

Severity of Emergency / Transport Priority	☐ **RED / PRIORITY 1 Life or limb threatening injury or illness. Evacuation need is IMMEDIATE** *Ex: Unconscious, difficulty breathing, bleeding severely, 2º – 3º burns more than 4 palm sizes, heat stroke, disoriented.* ☐ **YELLOW / PRIORITY 2 Serious Injury or illness. Evacuation may be DELAYED if necessary.** *Ex: Significant trauma, unable to walk, 2º – 3º burns not more than 1-3 palm sizes.* ☐ **GREEN / PRIORITY 3 Minor Injury or illness. Non-Emergency transport** *Ex: Sprains, strains, minor heat-related illness.*	
Nature of Injury or Illness & Mechanism of Injury		*Brief Summary of Injury or Illness (Ex: Unconscious, Struck by Falling Tree)*
Transport Request		*Air Ambulance / Short Haul/Hoist Ground Ambulance / Other*
Patient Location		*Descriptive Location & Lat. / Long. (WGS84)*
Incident Name		*Geographic Name + "Medical" (Ex: Trout Meadow Medical)*
On-Scene Incident Commander		*Name of on-scene IC of Incident within an Incident (Ex: TFLD Jones)*
Patient Care		*Name of Care Provider (Ex: EMT Smith)*

3. INITIAL PATIENT ASSESSMENT: *Complete this section for each patient as applicable (start with the most severe patient)*

Patient Assessment: See IRPG page 106

Treatment:

4. TRANSPORT PLAN:

Evacuation Location (*if different*): (*Descriptive Location (drop point, intersection, etc.) or Lat. / Long.*) Patient's ETA to Evacuation Location:

Helispot / Extraction Site Size and Hazards:

5. ADDITIONAL RESOURCES / EQUIPMENT NEEDS:

Example: Paramedic/EMT, Crews, Immobilization Devices, AED, Oxygen, Trauma Bag, IV/Fluid(s), Splints, Rope rescue, Wheeled litter, HAZMAT, Extrication

6. COMMUNICATIONS: Identify State Air/Ground EMS Frequencies and Hospital Contacts as applicable

Function	Channel Name/Number	Receive (RX)	Tone/NAC *	Transmit (TX)	Tone/NAC *
COMMAND					
AIR-TO-GRND					
TACTICAL					

7. CONTINGENCY: ***Considerations:*** ***If primary options fail, what actions can be implemented in conjunction with primary evacuation method? Be thinking ahead.***

8. ADDITIONAL INFORMATION: *Updates/Changes, etc.*

REMEMBER: Confirm ETA's of resources ordered. Act according to your level of training. Be Alert. Keep Calm. Think Clearly. Act Decisively.

Notes:

NOTES:

ENGINE TYPING AND REQUIRED NATIONAL STANDARDS

	Engine Type							
	Structure		Wildland					
Requirements	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**9***
Tank minimum capacity (gal)	300	300	500	750	400	150	50	50
Pump minimum flow (gpm)	1000	500	150	50	50	**50**	10	6
@ rated pressure (psi)	150	150	250	100	100	100	100	100
Hose 2½"	1200	1000	-	-	-	-	-	-
1½"	500	500	1000	300	300	300	-	100 ½"
1"	-	-	500	300	300	300	200	
Ladders per NFPA1901****	Yes	Yes	-	-	-	-	-	-
Master stream 500 gpm min.	Yes	-	-	-	-	-	-	-
Pump and roll	-	-	Yes	Yes	Yes	Yes	Yes	Yes
Maximum GVWR (lbs)	-	-	-	-	26,000	19,500	14,000	
Personnel (min)	4**	3	3***	3***	3***	3***	3***	3

*- State standard not NWCG requirement
**- In-State standard is 4 personnel (Out-of-State requires 4 personnel)
***-In-State standard is 3 personnel (Out-of-State requires 3 personnel)
****-In-State standard is 20 feet of ladder (Out-of-State requires 48 feet)

Common additional needs. Requested as needed.
-All wheel drive
-High pressure pump (250 psi@½ flow of Type)
-Foam Proportioner
-Compressed air foam system (CAFS) with minimum 40 cfm compressor
-Additional personnel

WATER TENDER TYPES:

	Water Tender Type						
	Support			Tactical		State Standard	
Requirements	**S1**	**S2**	**S3**	**Tl**	**T2**	**4***	**5***
Tank capacity (gal)	4000	2500	1000	2000	1000	400+	400+
Pump minimum flow(gpm)	300	200	200	250	250	80+	---
@. rated pressure (psi)	50	50	50	150	150	---	---
Max. refill time (minutes)	30	20	15	---	---	---	---
Pump and roll	---	---	---	Yes	Yes		
Personnel (min)	1	1	I	2	2	I	1

Minimum Standards by Type

* - State standard not NWCG requirements

- All types shall meet federal, state and agency requirements for motor vehicle safety standards, including all gross vehicle weight ratings when fully loaded.
- Type 3 engines and tactical water tenders shall be equipped with a foam proportioner system.

ENGINE TYPING AND REQUIRED NATIONAL STANDARDS

- All water tenders and engine types 3 through 6 shall be able to prime and pump water from a 10-foot **lift.**
- Personnel shall meet the qualification requirements of NWCG *Wildland Fire Qualification System Guide,* PMS 310-1.

    - Water tenders must carry appropriate hose, clamps, adapters, and tools to be able to fill engines and or portable tanks. Tenders must also carry a minimum of one shovel and Pulaski. Tenders participating in out of state dispatches must meet minimum federal guidelines for equipment and accessories.

- General specification for Engines and Tenders:
    - Larger diameter hose may be substituted for smaller hose to achieve total needed length.
    - Hose size is hose coupler size.
    - Engines must carry fittings to connect all hose on the apparatus.

- Ordered Structural Fire Engines - Any engine specifically ordered for the purpose of providing structural fire protection should have the basic gear and safety equipment required by structural fire fighting standards. Each engine must have, at a minimum, the following items for personnel:

    - NFPA approved protective clothing for structural fire fighting.
    - NFPA approved protective hoods.
    - NFPA approved gloves for structural fire fighting.
    - NFPA approved helmets for structural fire fighting.
    - NFPA approved SCBA's; for structural fire fighting.
    - NFPA approved footwear for structural fire fighting.
        - 400 ft of **1** ½ " single jacket wildland hose.
        - 200 ft of l" single jacket wildland hose.
        - 2- Shovels: 1 -McLeod, 1 -Pulaski
        - The following appliances: 2 - **1** ½"to 1"Forestry "T's", 2 - Reducers
            - NST - I ½ "to 1".
            - 2 - 1 ½ " - 40 GPM nozzles.
            - 2 - l" - 20 GPM nozzles.
            - 2 - Forestry clamps for single jacket wildland hose.
        - Fire shelters for all engine crew members.
        - Wildland fire personal protective equipment for all engine crew members.

Engine Stocking Levels and Recommended Items

This list is intended to be a general guideline and reference list of what is suggested to be carried on any type 4 or 6wildland fire engine. NOT REQUIRED TO HAVE ALL ITEMS.

Appendix M
NUS Engines

The following chart shows the NUS minimum stocking levels required for agency engines.
BLM units see the agency-specific NUS on the NFEP website.

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Fire Tools and Equip	McLeod	0296	1	
	Combination Tool	1180	1	1
	Shovel	0171	3	2
	Pulaski	0146	3	2
	Backpack Pump	1149	3	2
	Fusees (case)	0105	1	½
	Foam, concentrate, Class A (5-gallon)	1145	1	1
	Chainsaw (and chaps)		1	1
	Chainsaw Tool Kit	0342	1	1
	Drip Torch	0241	2	1
	Portable Pump		*	*
Medical	First Aid Kit, 20-25 person	1143	1	1
	Burn Kit		1	1
	Body Fluids Barrier Kit	0640	1	1
General Supplies	Flashlight, general service	0069	1	1
	Chock Blocks		1	1
	Tow Chain or Cable	1856	1	1
	Jack, hydraulic (comply w/GVW)		1	1
	Lug Wrench		1	1
	Pliers, fence		1	1
	Food (48-hour supply)	1842	1	1
	Rags	3309	*	*
	Rope/Cord (feet)		50	50
	Sheeting, plastic, 10' x 20'	1287	1	1
	Tape, duct	0071	1	1
	Tape, filament (roll)	0222	2	2
	Water (gallon/person) minimum		2	2
	Bolt Cutters		1	1
	Toilet Paper (roll)	0142	*	*
	Cooler or Ice Chest	0557	*	*
	Hand Primer, Mark III	0145	*	*
	Hose Clamp	0046	2	1
	Gaskets (set)		1	1
	Pail, collapsible	0141	1	1
	Hose Reel Crank		*	*

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Safety	Fire Extinguisher (5 lb)	2143	1	1
	Flagging, Pink (roll)	0566	*	*
	Flagging, Yellow w/Black Stripes (roll)	0267	*	*
	Fuel Safety Can (Type 2 OSHA, metal, 5-gallon)	1291	*	*
	Reflector Set		*	*
	Class 2 or 3 High Visibility Apparel (1 per seat belt)	1242	**	**
Vehicle and Pump Support	General Took Kit (5180-00-177-7033/GSA)		1	1
	Oil, automotive, quart		4	2
	Oil, penetrating, can		1	1
	Oil, automatic transmission, quart		1	1
	Brake Fluid, pint		1	1
	Filter, gas		1	1
	Fan Belts		1	1
	Spark Plugs		1	1
	Hose, air compressor w/adapters		1	0
	Fuses (set)		1	1
	Tire Pressure Gauge		1	1
	Jumper Cables		1	1
	Battery Terminal Cleaner		*	*
	Tape, electrical, plastic	0619	1	1
	Tape, Teflon		1	1
Personal Gear (Extra Supply)	File, mill, bastard	0060	*	*
	Head Lamp	0713	1	1
	Hard Hat	0109	1	1
	Goggles	1024	2	2
	Gloves		*	*
	First Aid Kit, individual	0067	1	1
	Fire Shirt		*	*
	Fire Shelter w/case and liner	0169	2	1
	Packsack	0744	2	1
	Batteries, headlamp (pkg)	0030	6	4
	Ear Plugs (pair)	1027	3	3
Radio	Portable		1	1
	Mobile		1	1
	Batteries (for portable radio)		2	2

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Hose	Booster (feet/reel)	1220	100	100
	Suction (length, 8' or 10')		2	2
	1" NPSH (feet)	0966	300	300
	1½" NH (feet)	0967	300	300
	¾" NH, garden (feet)	1016	300	300
	1½" NH, engine protection (feet)		20	20
	1½" NH, refill (feet)		15	15
Nozzle	Forester, 1" NPSH	0024	3	2
	Adjustable, 1" NPSH	0138	4	2
	Adjustable, 1½" NH	0137	5	3
	Adjustable, ¾" NH	0136	4	2
	Foam, ¾" NH	0627	1	1
	Foam 1½" NH	0628	1	1
	Mopup Wand	0720	2	1
	Tip, Mopup Wand	0735	4	2
	Tip, Forester, Nozzle, fog	0903	*	*
	Tip, Forester Nozzle, straight stream	0638	*	*
Wye	1" NPSH, Two-Way, Gated	0259	2	1
	1½" NH, Two-Way, Gated	0231	4	2
	¾" NH w/Ball Valve, Gated	0739	6	4
Adapter	1" NPSH-F to 1" HN-M	0003	*	*
	1" NH-F to 1" NPSH-M	0004	1	1
	1½" NPSH-F to 1 ½" NH-M	0007	1	1
	1½" NH-F to 1 ½" NPSH-M	0006	*	*
Increaser	¾" NH-F to 1" NPSH-M	2235	1	1
	1" NPSH-F to 1 ½" NH-M	0416	2	1
Coupling	1" NPSH, Double Female	0710	1	1
	1" NPSH, Double Male	0916	1	1
	1½" NH, Double Female	0857	2	2
	1½" NH, Double Male	0856	1	1
Reducer/ Adapter	1" NPSH-F to ¾" NH-M	0733	3	3
	1½" NH-F to 1 NPSH-M	0010	6	4
	2" NPSH-F to 1 ½" NH-M	0417	*	*
	2½" NPSH-F to 1 ½" NH-M	2229	*	*
Reducer	1½" NH-F to 1" NH-M	0009	1	1
	2½" NH-F to 1 ½" NH-M	2230	1	1
Tee	1" NPSH-F x 1" NPSH-M x 1" NPSH-M, w/cap	2240	2	2
	1½" NH-F x 1 ½" NH-M x 1" NPSH-M w/cap	0731	2	2
	1½" NH-F x 1 ½" NH-M x 1" NPSH-M w/valve	0230	2	2

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Valve	1½" NH-F, Automatic Check and Bleeder	0228	1	1
	¾" NH, Shut Off	0738	5	5
	1" Shut Off	1201	1	1
	1½" Shut Off	1207	1	1
	Foot, w/strainer		1	1
Injector	1" NPSH x 1/12" NH, Jet Refill	7429	*	*
Wrench	Hydrant, adjustable, 8"	0688	1	1
	Spanner, 5", 1" to 1½" hose size	0234	4	1
	Spanner, 11", 1½" to 2 ½" hose size	0235	2	2
	Pipe, 14"	0934	1	1
	Pipe, 20"		1	1
Engine	*Wildland Fire Incident Management Field Guide* (PMS 210)	2943	1	1
	GPS Unit		1	1
	Belt Weather Kit	1050	1	1
	Binoculars		1	1
	Map Case w/ maps		1	1
	Inventory List		1	1
	Current *Interagency Standards for Fire and Fire Aviation Operations*		1	1

* No minimums – carried by engines as an option, within weight limitations

** One per seat belt

NPS – Additional or Differing Items Recommended by NPS

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Fire Tools and Equip[1]	Flapper (NPS)		*	*
	Council Rake (NPS)	1807	*	*
	Leaf blower		*	*
	Shovel	0171	2	1
	Extra Quart, 2 cycle mix		2	1
	Portable Pump		1	*
General Supplies	Chock Blocks		1	1
	Tape, filament (roll)	0222	2	1
	Bolt Cutters		*	*
	Hose Clamp	0046	2	2
Safety	Reflector Set		1	1
	Oil, automotive, quart		2	1

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Vehicle and Pump Support	Power steering Fluid		1	1
	Antifreeze (seasonal)		*	*
	Filter, air for engine and pump		*	*
Personal Gear (Extra Supply)	File, mill, bastard	0060	*	*
	Fire Shelter w/case and liner	0925/0975	1	1
	Packsack	0744	2	1
Radio	Batteries (for portable radio)		2	2
Hose	2½" Refill Hose, Water tender		*	*
Nozzle	Adjustable, 1 ½" NH	0137	3	3
Wyes	¾" NH w/Ball Valve, Gated	0739	6	2
Coupling	1" NPSH, Double Male	0916	2	1
	1" NH, Double Male	0856	2	2
Reducer/ Adapter	1" NPSH-F to ¾" NH-M	0733	3	2
	1½" NH-F to 1 NPSH-M	0010	6	3
Tee	1" NPSH-F x 1" NPSH-M x 1" NPSH-M, w/cap	2240	2	*
Valve	1½" NH-F, Automatic Check and Bleeder	0228	1	*
	¾" NH, Shut Off	0738	4	2
Wrench	Pipe, 20"		1	*
Engine	Accident Forms (Vehicle and Personnel)		1	1
	Compass		1	1

[1] A minimum of eight tools for type 3, 4, 5 engines and a minimum of five tools for type 6 engines is required. The listed numbers of tools in each box are required to be on the engine. Beyond that, the tools listed as optional or additional required tools can make up the rest of the minimum number required for engines.

* No minimums – carried by engines as an option, within weight limitations

NWCG Wildland Fire Risk and Complexity Assessment, PMS 236

The NWCG Wildland Fire Risk and Complexity Assessment should be used to evaluate firefighter safety issues, assess risk, and identify the appropriate incident management organization. Determining incident complexity is a subjective process based on examining a combination of indicators or factors. An incident's complexity can change over time; incident managers should periodically re-evaluate incident complexity to ensure that the incident is managed properly with the right resources.

Instructions:

Incident Commanders should complete Part A and Part B and relay this information to the Agency Administrator. If the fire exceeds initial attack or will be managed to accomplish resource management objectives, Incident Commanders should also complete Part C and provide the information to the Agency Administrator. Incident Commanders should complete Part D if the recommended organization in Part C is a Type 2/CIMT or
Type 1/CIMT and should also discuss the need to increase or reduce capacity/positions with the Agency Administrator.

Part A: Firefighter Safety Assessment

Evaluate the following items, mitigate as necessary, and note any concerns, mitigations, or other information.

Evaluate these items	Concerns, mitigations, notes
Lookouts, Communication, Escape Routes, and Safety Zones (LCES).	
Fire Orders and Watch Out Situations.	
Multiple operational periods have occurred without achieving initial objectives.	
Incident personnel are overextended mentally and/or physically and are affected by cumulative fatigue.	
Communication is ineffective with tactical resources and/or dispatch.	
Operations are at the limit of span of control.	
Aviation operations are complex and/or aviation oversight is lacking.	
Logistical support for the incident is inadequate or difficult.	

Part B: Relative Risk Assessment

Values				Notes/Mitigation
B1. Infrastructure/Natural/Cultural Concerns **Based on the number and kinds of values to be protected, and the difficulty to protect them, rank this element low, moderate, or high.** Considerations: key resources potentially affected by the fire such as urban interface, structures, critical municipal watershed, commercial timber, developments, recreational facilities, power/pipelines, communication sites, highways, potential for evacuation, unique natural resources, special-designation areas, T&E species habitat, cultural sites, and wilderness.	**L**	**M**	**H**	
B2. Proximity and Threat of Fire to Values **Evaluate the potential threat to values based on their proximity to the fire, and rank this element low, moderate, or high.**	**L**	**M**	**H**	
B3. Social/Economic Concerns **Evaluate the potential impacts of the fire to social and/or economic concerns, and rank this element low, moderate, or high.** Considerations: impacts to social or economic concerns of an individual, business, community, or other stakeholder; other fire management jurisdictions; tribal subsistence or gathering of natural resources; air quality regulatory requirements; public tolerance of smoke; and restrictions and/or closures in effect or being considered.	**L**	**M**	**H**	
Hazards				**Notes/Mitigation**
B4. Fuel Conditions **Consider fuel conditions ahead of the fire and rank this element low, moderate, or high.** Evaluate fuel conditions that exhibit high rate of spread (ROS) and intensity for your area, such as those caused by invasive species or insect/disease outbreaks; continuity of fuels; low fuel moisture.	**L**	**M**	**H**	
B5. Fire Behavior **Evaluate the current fire behavior and rank this element low, moderate, or high.** Considerations: intensity; rates of spread; crowning; profuse or long-range spotting.	**L**	**M**	**H**	
B6. Potential Fire Growth **Evaluate the potential fire growth, and rank this element low, moderate, or high.** Considerations: Potential exists for extreme fire behavior (fuel moisture, continuity, winds, etc.); weather forecast indicating no significant relief or worsening conditions; resistance to control.	**L**	**M**	**H**	
Probability				**Notes/Mitigation**
B7. Time of Season **Evaluate the potential for a long-duration fire and rank this element low, moderate, or high.** Considerations: time remaining until a season ending event.	**L**	**M**	**H**	
B8. Barriers to Fire Spread **If many natural and/or human-made barriers are present and limiting fire spread, rank this element low. If some barriers are present and limiting fire spread, rank this element moderate. If no barriers are present, rank this element high.**	**L**	**M**	**H**	
B9. Seasonal Severity **Evaluate fire danger indices and rank this element low/moderate, high, or very high/extreme.** Considerations: energy release component (ERC); drought status; live and dead fuel moistures; fire danger indices; adjective fire danger rating; preparedness level.	**L/M**	**H**	**VH/E**	
Enter the number of items selected for each column.	0	0	0	

Relative Risk Rating (select one):

Low	◉	Majority of items are Low, with a few items rated as Moderate and/or High.
Moderate	○	Majority of items are Moderate, with a few items rated as Low and/or High.
	○	

High	Majority of items are High; A few items may be rated as Low or Moderate.

Part C: Organization

Relative Risk Rating (From Part B)					Notes/Mitigation
Select the Relative Risk Rating (from Part B).	**N/A**	**L**	**M**	**H**	
Implementation Difficulty					**Notes/Mitigation**
C1. Potential Fire Duration **Evaluate the estimated length of time that the fire may continue to burn if no action is taken and amount of season remaining. Rank this element low, moderate, or high.** Note: This will vary by geographic area.	**N/A**	**L**	**M**	**H**	
C2. Incident Strategies (Course of Action) **Evaluate the level of firefighter and aviation exposure required to successfully meet the current strategy and implement the course of action. Rank this element as low, moderate, or high.** Considerations: Availability of resources; likelihood that those resources will be effective; exposure of firefighters; reliance on aircraft to accomplish objectives; trigger points clear and defined.	**N/A**	**L**	**M**	**H**	
C3. Functional Concerns **Evaluate the need to increase organizational structure to manage the incident adequately and safely and rank this element N/A (current existing organization doesn't have functional concerns), low (adequate), moderate (some additional support needed), or high (current capability inadequate).** Considerations: Incident management functions (logistics, finance, operations, information, planning, safety, and/or specialized personnel/equipment) are inadequate and needed; access to emergency medical services (EMS) support, heavy commitment of local resources to logistical support; ability of local businesses to sustain logistical support; substantial air operation which is not properly staffed; worked multiple operational periods without achieving initial objectives; incident personnel overextended mentally and/or physically; Incident Action Plans, briefings, etc. missing or poorly prepared; performance of firefighting resources affected by cumulative fatigue; and ineffective communications.	**N/A**	**L**	**M**	**H**	
Socio/Political Concerns					**Notes/Mitigation**
C4. Objective Concerns **Evaluate the complexity of the incident objectives and rank this element low, moderate, or high.** Considerations: clarity; ability of current organization to accomplish; disagreement among cooperators; tactical/operational restrictions; complex objectives involving multiple focuses; objectives influenced by serious accidents or fatalities.	**N/A**	**L**	**M**	**H**	
C5. External Influences **Evaluate the effect external influences will have on how the fire is managed and rank this element low, moderate, or high.** Considerations: limited local resources available for initial attack; increasing media involvement, social/print/television media interest; controversial fire policy; threat to safety of visitors from fire and related operations; restrictions and/or closures in effect or being considered; pre-existing controversies/ relationships; smoke management problems; sensitive political concerns/interests.	**N/A**	**L**	**M**	**H**	
C6. Ownership Concerns **Evaluate the effect ownership/jurisdiction will have on how the fire is managed and rank this element low, moderate, or high.** Considerations: disagreements over policy, responsibility, and/or management response; fire burning or threatening more than one jurisdiction; potential for unified command; different or conflicting management objectives; potential for claims (damages); disputes over suppression responsibility.	**N/A**	**L**	**M**	**H**	
Enter the number of items selected for each column.	0	0	0	0	

Part C: Organization (continued)

Recommended Organization (select one):

Type 5	◉	Majority of items rated as N/A; a few items may be rated in other categories.
Type 4	○	Majority of items rated as Low, with some items rated as N/A, and a few items rated as Moderate or High.
Type 3	○	Majority of items rated as Moderate, with a few items rated in other categories.
Type 2/CIMT	○	Majority of items rated as Moderate, with a few items rated as High. Use Part D: Functional Complexity to document the need to increase or reduce capacity/positions.
Type 1/CIMT	○	Majority of items rated as High; a few items may be rated in other categories. Use Part D: Functional Complexity to document the need to increase or reduce capacity/positions.

Rationale:

Use this section to document the incident management organization for the fire. If the incident management organization is different than the Wildland Fire Risk and Complexity Assessment recommends, document why an alternative organization was selected. Use the Notes/Mitigation column to address mitigation actions for a specific element and include these mitigations in the rationale.

Part D: Functional Complexity

				Notes/Mitigation
D1. Functional Complexity – Command **Evaluate the need to increase organizational structure of the command staff to manage the incident adequately and safely, and rank the element as low (adequate), moderate (some additional support needed), or high (current capability inadequate).** Considerations may include but are not limited to unified command with a large number of jurisdictions involved; elected/appointed governing officials, political organizations and stakeholders require a high level of coordination and communication; extensive community relations; incident personnel overextended mentally and/or physically; remote access and rugged terrain; multiple safety concerns noted in Part A require additional staff to mitigate; performance of firefighting resources affected by cumulative fatigue; pandemic/infectious disease-related issues; ineffective communications; law enforcement needs; evacuated/relocated populations; legislative affairs concerns; extensive cultural factors.	**L**	**M**	**H**	

				Notes/Mitigation
D2. Functional Complexity – Planning **Evaluate the need to increase organizational structure of the planning staff to manage the incident adequately and safely, and rank the element as low (adequate), moderate (some additional support needed), or high (current capability inadequate).** Continual need for long-term strategic risk complexity assessment; complex operational risk management mitigation; incident action plans, briefings, etc., missing or poorly prepared; extensive number of responders; large electronic documentation package; multiple virtual or remote meetings/briefings to coordinate; complex mapping or situation products required; difficulty obtaining air travel or other demobilization challenges; high volume of extension requests; and/or multiple or complex situation summary reports.	**L**	**M**	**H**	
D3. Functional Complexity – Operations/Air Operations **Evaluate the need to increase organizational structure of the operations/air operations staff to manage the incident adequately and safely, and rank the element as low (adequate), moderate (some additional support needed), or high (current capability inadequate).** Urban interface/intermix requirements; extensive equipment needs; remote access and rugged terrain; supervision requirements to reduce span of control; worked multiple operational periods without achieving initial objectives; unexploded ordnance; environmental/cultural/social/historical concerns; large amount of hazard trees; large initial attack response area; extensive fire area; night operations; substantial air operation and aerial supervision which is not properly staffed; airspace conflicts or impacts to air operations; multiple/overlapping Temporary Flight Restrictions (TFRs); military mobilization; and/or national guard personnel and aircraft mobilization.	**L**	**M**	**H**	
D4. Functional Complexity – Finance **Evaluate the need to increase organizational structure of the finance staff to manage the incident adequately and safely, and rank the element as low (adequate), moderate (some additional support needed), or high (current capability inadequate).** Large volume of personnel and equipment time; significant amount of incident responders are contractors; complicated cost share methodology with multiple jurisdictions; complexing, merging or multiple incidents; no preestablished or extensive land use agreements; understaffed or no buying team; large scale or long-term financial issues; large finance package; electronic records management; administering or establishing numerous complex contracts; established patterns of injuries/illnesses or tort claims; and/or distributed responders over long distances or remote camps without internet/cell connectivity.	**L**	**M**	**H**	
D5. Functional Complexity – Logistics **Evaluate the need to increase organizational structure of the logistics staff to manage the incident adequately and safely, and rank the element as low (adequate), moderate (some additional support needed), or high (current capability inadequate).** Large number of personnel; multiple bases/camps; remote access; significant need for law enforcement and security; access to emergency medical services (EMS) support; heavy commitment of local resources for logistical support; ability of local businesses to sustain logistical support; telecommunications difficulties; ordering from multiple agencies dispatch centers; supply chain challenges; facilities requirements; and/or remote areas that challenge support needs.	**L**	**M**	**H**	

Name of Incident:_____ Unit(s):_____

Date/Time:_____ Signature of Preparer:_____

Indicators of Incident Complexity

Common indicators may include the area (location) involved; threat to life, environment, and property; political sensitivity, organizational complexity, jurisdictional boundaries, values at risk, and weather. Most indicators are common to all incidents, but some may be unique to a particular type of incident. The following are common contributing indicators for each of the complexity types.

Type 5 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident is typically terminated or concluded (objective met) within a short time once resources arrive on scene. • For incidents managed for resource objectives, minimal staffing/oversight is required. • Resources vary from two to six firefighters. • Formal Incident Planning Process not needed. • Written Incident Action Plan (IAP) not needed. • Minimal effects to population immediately surrounding the incident. • Critical Infrastructure, or Key Resources, not adversely affected.	• Incident Commander (IC) position filled. • Single resources are directly supervised by the IC. • Command Staff or General Staff positions not needed to reduce workload or span of control.

Type 4 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident objectives are typically met within one operational period once resources arrive on scene, but resources may remain on scene for multiple operational periods. • Multiple resources may be needed. • Resources may require limited logistical support. • Formal incident planning process not needed. • Written IAP not needed. • Limited effects to population surrounding incident. • Critical infrastructure or key resources may be adversely affected, but mitigation measures are uncomplicated and can be implemented within one operational period. • Elected and appointed governing officials, stakeholder groups, and political organizations require little or no interaction.	• IC role filled. • Resources either directly supervised by the IC or supervised through an Incident Command System (ICS) leader position. • Task Forces or Strike Teams may be used to reduce span of control to an acceptable level. • Command staff positions normally not filled to reduce workload or span of control. • General staff position(s) normally not filled to reduce workload or span of control.

Type 3 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident typically extends into multiple operational periods. • Incident objectives usually not met within the first or second operational period. • Resources may need to remain at scene for multiple operational periods, requiring logistical support. • Numerous kinds and types of resources may be required. • Formal incident planning process is initiated and followed. • Written IAP needed for each operational period. • Responders may range up to 200 total personnel. • Incident may require an incident base to provide support. • Population surrounding incident affected. • Critical infrastructure or key resources may be adversely affected and actions to mitigate effects may extend into multiple operational periods. • Elected and appointed governing officials, stakeholder groups, and political organizations require some level of interaction.	• IC role filled. • Numerous resources supervised indirectly through the establishment and expansion of the operations section and its subordinate positions. • Division supervisors, group supervisors, task forces, and strike teams used to reduce span of control to an acceptable level. • Command staff positions may be filled to reduce workload or span of control. • General staff position(s) may be filled to reduce workload or span of control. • ICS functional units may need to be filled to reduce workload.

Type 2 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident displays moderate resistance to stabilization or mitigation and will extend into multiple operational periods covering several days. • Incident objectives usually not met within the first several Operational Periods. • Resources may need to remain at scene for up to 7 days and require complete logistical support. • Numerous kinds and types of resources may be required including many that will trigger a formal demobilization process. • Formal Incident Planning Process is initiated and followed. • Written IAP needed for each Operational Period. • Responders may range from 200 to 500 total. • Incident requires an Incident Base and several other ICS facilities to provide support. • Population surrounding general incident area affected. • Critical Infrastructure or Key Resources may be adversely affected, or possibly destroyed, and actions to mitigate effects may extend into multiple Operational Periods and require considerable coordination. • Elected and appointed governing officials, stakeholder groups, and political organizations require a moderate level of interaction.	• IC role filled. • Large numbers of resources supervised indirectly through the expansion of the Operations Section and its subordinate positions. • Branch Director position(s) may be filled for organizational or span of control purposes. • Division Supervisors, Group Supervisors, Task Forces, and Strike Teams used to reduce span of control. • All Command Staff positions filled. • All General Staff positions filled. • Most ICS functional units filled to reduce workload.

Type 1 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident displays high resistance to stabilization or mitigation and will extend into numerous operational periods covering several days to several weeks. • Incident objectives usually not met within the first several Operational Periods. • Resources may need to remain at scene for up to 14 days, require complete logistical support, and several possible personnel replacements. • Numerous kinds and types of resources may be required, including many that will trigger a formal demobilization process. • Department of Defense (DOD) assets, or other nontraditional agencies, may be involved in the response, requiring close coordination and support. • Complex aviation operations involving multiple aircraft may be involved. • Formal Incident Planning Process is initiated and followed. • Written IAP needed for each Operational Period. • Responders may range from 500 to several thousand total. • Incident requires an Incident Base and numerous other ICS facilities to provide support. • Population surrounding the region or state where the incident occurred is affected. • Numerous Critical Infrastructure or Key Resources adversely affected or destroyed. Actions to mitigate effects will extend into multiple Operational Periods spanning days or weeks and require long-term planning and considerable coordination. • Elected and appointed governing officials, stakeholder groups, and political organizations require a high level of interaction.	• IC role filled. • Large numbers of resources supervised indirectly through the expansion of the Operations Section and its subordinate positions. • Branch Director Position(s) may be filled for organizational or span of control purposes. • Division Supervisors, Group Supervisors, Task Forces, and Strike Teams used to reduce span of control. • All Command Staff positions filled, and many include assistants. • All General Staff positions filled, and many include deputy positions. • Most or all ICS functional units filled to reduce workload.

Complex Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident displays moderate to high resistance to stabilization or mitigation and will extend into numerous operational periods covering several days to several weeks. • Incident objectives usually not met within the first several Operational Periods. • Resources may need to remain at scene for up to 7-21 days, require complete logistical support, and several possible personnel replacements. • Numerous kinds and types of resources may be required, including many that will trigger a formal demobilization process. • Department of Defense (DOD) assets, or other nontraditional agencies, may be involved in the response, requiring close coordination and support. • Complex aviation operations involving multiple aircraft may be involved. • Complex incident and operational risk management mitigation is required. • Formal Incident Planning Process is initiated and followed. • Continual need for long-term strategic risk complexity assessment. • Written IAP needed for each Operational Period. • Responders may range from 200 to several thousand total. • Incident requires an Incident Base and numerous other ICS facilities to provide support. • Population surrounding the region or state where the incident occurred is affected. • Numerous Critical Infrastructure or Key Resources adversely affected or destroyed. Actions to mitigate effects will extend into multiple Operational Periods spanning days or weeks and require long-term planning and considerable coordination. • Elected and appointed governing officials, stakeholder groups, and political organizations require a high level of interaction.	• IC role filled. • Large numbers of resources supervised indirectly through the expansion of the Operations Section and its subordinate positions. • Branch Director Position(s) may be filled for organizational or span of control purposes. • Division Supervisors, Group Supervisors, Task Forces, and Strike Teams used to reduce span of control. • All Command Staff positions filled, and many include assistants. • All General Staff positions filled, and many include deputy positions. • Most or all ICS functional units filled to reduce workload.

The *NWCG Wildland Fire Risk and Complexity Assessment*, PMS 236, is developed and maintained by the Incident and Position Standards Committee (IPSC), an entity of the National Wildfire Coordinating Group (NWCG). This publication is available electronically at https://www.nwcg.gov/publications/236.

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INCIDENT ORGANIZER

Initial Attack Size-Up

Date:

Time of Dispatch:

Time of Arrival on Scene:

1. **Fire Name:**

2. **Incident Commander**

3. **Fire Location:** (degrees-minutes-seconds)
   LAT: N
   LONG: W
   Land ownership:
   Township: Range: Section:

4. **Size**

5. **Fuels Burning:**
   FM
   Adjacent fuels: FM

6. **Character of Fire:**
   Smoldering Creeping Running
   Torching Crowning Spotting

7. **Flame length:**

8. **Position on slope:**
   Bottom 1/3 Middle Top 1/3

9. **Percent slope:**

10. **Aspect:**

11. **Wind:** Speed
    Direction

12. **Spread Potential:**
    None
    Low, 0-5 Acres
    Moderate, 6-10 Acres
    High, 10-50 Acres Very high, 50+ Acres

13. **Values at Risk:** (circle those that apply)
    Houses
    Improvements
    Cultural/Historical
    Other:

14. **Hazards:** (circle those that apply)
    Snags HazMat
    Power lines Mine shafts
    Urban Interface
    Other:

Cause:
Protect Origin!
Unknown Cause – Order FINV!

Additional Resources Needed:

Fire Report Information

Time of Origin:

Time of Discovery:

Detection by:

Elevation: County:

Fire Number: **P** **SO**

Fire Declared Out:

Date: Time:

Final Acreage:
NFS: PVT: Total:

Signature:

Safety Checklist

(If you answer **NO** to any of these questions, **take corrective action immediately!**)

Yes	No	Do you have a current forecast?
Yes	No	Is observed weather consistent with forecast?
Yes	No	Can you control the fire with resources available under expected conditions?
Yes	No	Have you developed a plan to attack the fire? (Direct or indirect, anchor points, escape routes, head OR flank attack, priority areas?)
Yes	No	Have you communicated your plan to everyone on the incident?
Yes	No	Lookouts in place or can you see the entire fire area?
Yes	No	Can you communicate with everyone on the fire and with dispatch?
Yes	No	Escape routes and safety zones established? If you are using black, is it completely burned with no re-burn potential?
Yes	No	Safety and standard fire orders being followed?
Yes	No	Have you reported the status of the fire to dispatch?
Yes	No	Will you control the fire before the next operational period?
Yes	No	Do you have a complete list of assigned and ordered resources?
Yes	No	If the fire will not be controlled before the next operational period or the size of the organization exceeds the IC's capability to manage, have you informed dispatch?
Yes	No	Are you still comfortable managing this fire?

Risk Analysis

	LOW	MODERATE	HIGH	EXTREME
Haines Index	1-2	3	4	5-6
Relative Humidity	Over 45	35 to 45	20 to 35	Under 20
Wind Speed	Calm	Under 10	10 to 20	Over 20
Wind Indicators		Developing Cumulus	Thunder-heads Pre- sent	Cold Fronts or High Wind Aloft
Slope Percent	Flat	Under 15	15 to 30	Over 30
Flame Length	Under 2'	2' to 4'	4' to 8'	Over 8'
Resistance to Control	None	Some	Moderate	High
Spotting	None	Little	Some	Frequent
Time of Day	2000-1000	1600-2000	1000-1200	1200-1600
Public Safety / Evacuation	No	Limited	Yes	In Process
Structure Loss Potential	None	Possibly	High	Already Involved
Have Enough Resources?	Yes	To be deter-mined	Not sure	No
Probability of Success	High	Moderate	Low	Poor

Predicted Weather					
Sky	Temp	RH %	20 ft Winds	Wind Direc-tion	Remarks (haines,lal,etc)

Spot Weather					
Time	Temp.	RH%	Wind Speed 20ft.	Wind Dir.	Remarks
Today					
Tonight					
Tomorrow					

On Site Weather Observations					
Location Quad. / Aspect, Drain- age / Etc.	Elev.	Obs. Time	Wind Speed 20 Ft	Temp Dry/Wet: RH/Dew Pt.	Remarks (Clouds, Etc.) Sheltering (Full, Par-tial, Unsheltered)
/ /				/ /	
/ /				/ /	
/ /				/ /	

Status Reporting		
Time	Acres	% Contained
		Contained
		Controlled

Incident Complexity Analysis (Type 3, 4, 5)		
FIRE BEHAVIOR	Yes	No
Fuels extremely dry and susceptible to long range spotting or you are experiencing extreme fire behavior.		
Weather forecast indicating no significant relief or worsening.		
Current or predicted fire behavior dictates indirect control strategy with large amounts of fuel within planned perime-ter.		
FIREFIGHTER SAFETY		
Performance of firefighting resources affected by cumulative fatigue.		
Overhead overextended mentally and/or physically.		
Communication ineffective with tactical resources or dispatch.		
ORGANIZATION		
Operations at the limit of span of control.		
Incident action plans, briefings, etc. missing or poorly prepared.		
Variety of specialized operations, support personnel, or equipment.		
Unable to properly staff air operations.		
Limited local resources available for initial attack.		
Heavy commitment of local resources to logistical support		
Existing forces worked 24 hours without success.		
Resources unfamiliar with local conditions and tactics.		
VALUES TO BE PROTECTED		
Urban interface; potential for evacuations.		
Fire burning or threatening more than one jurisdiction and potential for conflicting management objectives.		
Unique natural resources, wilderness, critical watershed, T & E habitat, cultural value sites.		
Sensitive political concerns, media involvement, or controversial fire policy		
If you have check "yes" on 3 to 5 of the analysis boxes, consider requesting the next level of incident management support.		

Communication Plan		
Net	Frequency	Name
Command		
Support		
A to G		
A to A		
TAC 1		
TAC 2		

Tactical Objectives

Resource Summary					
Resources Ordered	**Resources Identification**	**ETA**	**On Scene**	**Location/Assignment**	**Released**

Map Sketch

Directions to fire:

Summary of Current Actions	
Time	**Action**

What was planned?

What Actually happened?

Why did it happen?

What can we do better next time?

IRPG AAR
Page XIII

Correct Weaknesses / Sustain Strengths