

CHAPTER 40

EQUIPMENT AND SUPPLIES

All Equipment and Supply Orders will follow established ordering procedures (Type 1, 2, 3 incidents), except for the redistribution of supplies within the National Fire Equipment System (NFES). Redistribution of excess supply items will be coordinated by the designated NFES Cache Manager(s). Cache orders will be filled to meet timeframes specified, using the most economical service. All NFES cache items are shipped ready for fireline use.

Black Hills National Forest Cache

The Black Hills National Forest Fire Cache is located at the Supervisor's Office warehouse in Custer, SD and is available for interagency use.

Supplies from this Cache will be ordered through GPC. The Cache includes the following:

- Fire Equipment Cache (one 100-person tool cache)
- Fire Camp Unit
- Fire Cache First Aid Kit
- Assortment of road signs for fires.
- Firing Equipment:
 - 15 drip torches
 - 2 flare pistol & flares
 - 2 plastic sphere dispensers (10,000 spheres) at CUT Helibase

Equipment and Supplies-General

Each unit should maintain tools and supplies at a level to handle normal operations for initial attack and minor support, such as outfitting available forces on the unit, regular fire replacement, and normal fire activity. Local cache inventory lists are due to RMK by April 1, annually. The larger Interagency Fire Caches shall maintain tools and supplies at a level to handle 90 percent of normal large fire activities.

During active fires or for emergency restocking of the forest cache, a Resource Order will be placed with Great Plains Dispatch Center (GPC). GPC will notify the regional cache of the needed supplies. Orders will be relayed to the best current supply source for dispatch. This will usually be one of the following:

- Rocky Mountain Area Coordination Center see Chapter 40 in RMG for more in-depth instruction
- Other Service Centers
- Other Agencies

Equipment/Supplies Mobilization

For initial attack, dispatchers will follow the "closest forces" concept and utilize locally available resources. See GPC Initial Attack Dispatching Guidelines in

SOP book. When local resources are not available, orders should be placed to neighboring dispatch centers, RMACC or RMK. For NFES supplies, this could include using national caches in other geographic areas that may provide more efficient logistics in supporting RMA incidents.

For extended attack, contracted resources awarded under the competitive solicitation process shall be mobilized using established dispatch priority lists (DPLs) within their local dispatch area before at-incident agreements are issued on Federal Fires. All requests for contracted equipment shall be ordered through the host dispatch centers identified in the agreement and using established dispatch ordering channels. Dispatchers shall not hold contracted resources in reserve as a contingency force in a non-pay status when that resource is available. Refer to NMG Chapter 40 and RMG Chapter 40 also GPC SOG 25 for additional instructions.

Equipment/Supplies Demobilization

When demobilizing contracted tactical equipment, contractors awarded Incident Blanket Purchase Agreements (I-BPAs) as a result of competitive solicitations, shall be given priority to remain on the incident over tactical equipment with incident-only EERAs, unless the Incident Commander determines it necessary to deviate based on a specific incident need or objective. This applies to contracted tactical equipment only, and not all contracted resources.

Release information for equipment and accountable supply items must be promptly relayed through ROSS.

When a large fire is controlled and the tools and equipment are no longer needed, they should be returned to the appropriate cache as soon as possible for re-conditioning. Tools and equipment that are damaged or lost shall be replaced immediately and charged to the fire.

National Interagency Support Cache Ordering Procedures Refer to NMG Chapter 40 see also RMG Chapter 40 for shipping instructions.

NFES Items in Short Supply Refer to NMG Chapter 40.

Field Office Replenishment During Fire Season

If a unit uses their initial attack cache on a fire, it shall be permissible to reorder from RMK to restock the initial attack cache Refer to NMG Chapter 40 and RMG Chapter 40.

Field Office Replenishment Outside of Fire Season Refer to NMG page 57.

Incident Replacement of NFES Items

Refer to NMG Chapter 40, NFES Catalog, and Chapter 40 of the RMG.

The IMT or other incident personnel may authorize replacement of items at the incident if available, or by approving an Incident Replacement Requisition; OF-315/NFES 001300 for replacement of NFES items by the incident’s servicing cache. Should the replacement of the approved items not be feasible prior to demobilization of the requesting resource, the incidents servicing cache will forward the request to the resources servicing cache. Caches may only process requests for NFES items. Requests for non-NFES items should be requested on a separate incident replacement requisition to be processed by the home unit. Please refer to the current Interagency Incident Business Management Handbook (Chapter 30) for procedures dealing with replacement of non-NFES supplies and equipment. Also see RMG Chapter 40 for NFES shipping instructions.

Incident Replacement: Type 1 and Type 2 Incidents

The incident Supply Unit Leader (SPUL) will be responsible for handling incident replacement requisitions when a Type 1 or Type 2 IMT is assigned. The SPUL approves replacement requests based on Engine Accountability sheets or other equipment inventory documents approved by the requesting resource’s home unit. The use of the Incident Replacement Requisition Form (OF-315) is required. Refer to RMG Chapter 40.

Local Unit Incident Replacement: Type 3 and Type 4 Incidents Refer to NMG Chapter 40.

The hosting units’ Agency Administrator or authorized representative must approve all replacement requests. Follow procedures for incident replacement, Chapter 20. Refer to GPC SOG 25.

For Incident Replacement Only: Local units will assign supply order numbers, for all Type 3, 4 and 5 incidents utilizing the following blocks of numbers:

BKF		NBF	
Helitack	5000 - 5999	Bessey	10000 - 10999
Hell Canyon	7000 - 7999	Pine Ridge	11000 - 11999
Northern Hills	8000 - 8499	Pine Ridge J.C.	12000 - 12999
Bear Lodge	8500 - 8999	Fall River	13000 - 13999
Mystic	9000 - 9999	Wall	14000 - 14999
		Fort Pierre	15000 - 15999
NPS		SDS	
All Parks	16000 - 16999	All SDS	17000 - 17999

Please refer to GPC Standard Operating Procedure #25 effective May 23, 2013 for the complete process of ordering Incident supplies and Incident replacements.

Incident to Incident Transfer of Equipment and Supplies Refer to NMG Chapter 40.

National Incident Radio Support Cache (NIRSC) Refer to NMG Chapter 40.

NIRSC is a National Resource composed of multi-channel radio systems and kits available for complex incident communications. The priority use of NIRSC radio systems and kits are for active incidents. All radio systems and kits must be returned to NIRSC as soon as the incident has demobilized. A National Communications Duty Officer (CDO) is available at NIRSC throughout the year. Geographic Area Frequency Managers, Communication Coordinators (COMC), and Incident Communication Unit Leaders (COML) will coordinate with NICC, the Geographic Area, and the NIRSC CDO on all telecommunication issues.

For a complete listing of NIRSC telecommunications components, refer to the National Incident Radio Support Cache User's Guide, NFES 000968, or the NWCG Fire Supplies and Equipment Catalog, Part 1, NFES 000362 (<http://www.nwcg.gov/pms/pubs/catalog.htm>).

RMC will preposition at RMK three NIRSC starter systems (NFES #4390) from May 15 - Oct 15, annually, and up to four starter systems based on need. Refer to RMG Chapter 40.

National ICS Starter Radio Systems Refer to RMG Chapter 40.

For information on Starter Systems refer to the National Incident Radio Support Cache User's Guide, NFES #0968, or the NWCG Fire Supplies and Equipment Catalog Part 1, NFES #0362.

RMC will order the prepositioned starter system(s) on a R02 Radio Kit Staging/Preposition Supply resource order. When the NFES #4390 is transferred/committed to an incident, RMC will order a replacement starter system(s).

A Communications Unit Leader will be required for all dispatches of this system. Radios are ordered as Supplies. All radio equipment orders are sent direct to RMCC.

All NFES 4000 Series Radio Kits are ordered as Supply. Refer to RMG Chapter 40 for shipping instructions.

GPC Radio Caches

There is a small Radio Cache, of 20 handhelds and two scene of action (SOA) repeaters located at the BKF Cache in Custer, SD. The SD Wildland Fire Division has 10 KNG P150 portable radios and a 10 unit digital radio cache in Rapid City, SD. All these radios shall be ordered through GPC. If more radios are needed, a larger cache can be ordered through the Rocky Mountain Area Coordination Center in Lakewood, CO.

Radio Frequencies

There are four primary radio channels on the Black Hills National Forest, Forest Net; a simplex frequency, and North, Central, and South zones that each has a unique frequency pair. These zone frequencies are the primary frequencies used for communication. The three zones consist of nine repeaters on the forest to increase ground to ground communications. Each zone also has a portable repeater for use when needed.

There are two primary radio frequency pairs on the Nebraska National Forest. Forest Net East and Forest Net West each have their own frequency pair. These zone frequencies are the primary frequencies used for communication. These consist of ten repeaters on the forest to increase ground to ground communications. There is one portable repeater, on East Zone, for use when needed.

All Aviation Resources including Lead planes and the forest helicopter will have both air-to-air (AM) and air-to-ground (FM) radios installed as well as Air Guard. The air tankers will have air-to-air radios, as well as Air Guard and National Flight Following frequencies.

All radio frequencies are coordinated through the Great Plains Interagency Dispatch Center in Rapid City, though briefings and radio assignments may be provided by the helitack base in Custer, the Rapid City Retardant Base or any of the SEAT bases located in the GPC zone.

BKF Forest Net is used for all local Flight Following anywhere within radio range of any of the Black Hills National Forest transceiver sites.

South Dakota Wildland Fire Division utilizes a digital trucked system but has the capability of communicating on the Black Hills National Forest Analog repeaters within the Black Hills Fire Protection District. If Federal, State and Volunteer Fire Department resources are responding, the incident should be managed on an analog frequency as the State and Volunteer Fire Departments have analog capability but most of the Federal units do not have digital capability. However, the IC or GPC may designate an alternate frequency repeater or request a Portable or SOA Repeater for command if the Black Hills National Forest Analog repeaters cannot provide coverage. This will be based on the location of the fire.

The National Park Service will use Forest Service frequencies as follows:

- Devils Tower NM will use Black Hills NF (BKF) North Zone frequencies.
- Mt. Rushmore NM will use BKF Central Zone frequencies.
- Badlands NP will use NBF frequencies.
- Wind Cave NP and Jewel Cave NM will use BKF South Zone frequencies.

VFIRES can be used by Federal and State units to contact county fire resources. Use of these channels outside the counties for which they are authorized must be cleared by South Dakota Wildland Fire Division in Rapid City.

The State of South Dakota has 7 digital Special Ops channels for use upon request from GPC.

For a list of frequencies refer to GPC Communication Plans

Communications Trailers

Pennington County Search and Rescue has a communications trailer with Forest Service, Mutual Aid, and State frequencies. The trailer is equipped with an on-board generator and is suitable for use as a command center. The trailer is equipped with a 37" monitor that can be hooked up for projecting maps, IAP's, etc. It also has the capability to network computers, printers, and plotters and hook up to satellite/phone communications throughout. There are two slide outs to provide extra working space; heaters, air conditioning, a refrigerator, and a microwave to provide additional logistical support. The trailer can haul one ATV and should be ordered through GPC.

Radio Ordering

Requests for NIRSC radio systems and kits will be placed with NICC through established ordering channels. To insure proper frequency coordination, the ordering office must include the Latitude and Longitude of the incident on the resource order. Radios will be used as received without modification. Defective radio equipment will be immediately returned to NIRSC for maintenance. To maintain quality and quantity for the field, each Starter System or kit will be returned to NIRSC for rehabilitation immediately after each assignment. The incident or unit charged with custody of the radio equipment is responsible for a complete inventory of that equipment upon return from the incident. Refer to NMG Chapter 40.

Frequency and Radio Demobilization

NIRSC radio systems and kits should be inventoried, sealed, and returned promptly to NIRSC/NIFC. Do not stockpile kits. Spare seals are supplied in each box. Incidents are responsible for ensuring all radio systems or kits are returned or accounted for on a Property Loss Statement. Refer to RMG Chapter 40 for shipping instructions.

Fire/Project Remote Automatic Weather Stations,
(IRAWS-NFES 005869/PRAWS-NFES 005870)

Approximately 50 IRAWS and 15 PRAWS are cached at the Remote Sensing Fire Weather Support Unit for response to wildland fires and other projects requiring environmental monitoring. For specific use and description, refer to the NWCG Fire Supplies and Equipment Catalog, Part 1, NFES 005869 and 005870. The availability of equipment and associated technician support depends on a variety of factors. Prior phone coordination with the National Interagency Fire Center Remote Weather/Fire Weather Support Unit (RSFWSU) at (208) 387-5726 is recommended.

Incident Remote Automatic Weather Stations, (IRAWS) NFES 005869

Refer to NMG Chapter 40.

(REMOVED) Project Remote Automatic Weather Stations, (PRAWS) NFES 005870**National Contract Mobile Food Services and National Contract Mobile Shower Facilities**

For a complete listing of the Schedule of Items and contract specifications for the National Mobile Food Service Contract and National Mobile Shower Facilities Contract, refer to the current National Contract Mobile Food Services publication, NFES 001276, and the National Contract Mobile Shower Facilities publication, NFES 002729. This information can also be found at the following web site: <http://www.fs.fed.us/fire/contracting/>

Refer to NMG Chapter 40 and RMG Chapter 40.

National Contract Mobile Food Service Units

Refer to NMG Chapter 40 for additional contract information, and refer to the National Mobile Food Services Contract publication or the on the web at: <http://www.fs.fed.us/fire/contracting/food/food.htm>

National Contract Mobile Shower Facilities Units

Refer to NMG Chapter 40 for additional contract information, and refer to the National Mobile Shower Facilities Contract publication or on the web at: <http://www.fs.fed.us/fire/contracting/shower/shower.htm>

National Contract Mobile Food Services and Shower Facilities Mobilization

All National Contract and CWN (Call When Needed) Mobile Food Service Units and Mobile Shower Facility Units in the lower 48 States are ordered through and mobilized by NICC through established ordering channels.

Orders for National Food Service and Shower Units require a physical address with zip code in special needs and/or reporting instructions in ROSS.

Mobile Food Service Unit requests require a completed Food Service Request Form at the time of request. (See Chapter 80).

Shower Facilities requests require the approximate number of personnel to service, estimated duration, and date and time the showering is to begin.

Refer to RMG Chapter 40 for additional ordering considerations when ordering Mobile Food Services and Shower Facilities.

National Contract Mobile Food Services and Shower Facilities Reassignments

All reassignments of National Contract Mobile Food Services and Shower Facilities units will be communicated to the vendor by NICC. Refer to NMG Chapter 40.

National Contract Mobile Food Services and Shower Facilities Demobilization

All release information will be entered into ROSS within fifteen (15) minutes of demobilization. Contractors may take twenty-four (24) hours to rest and replenish supplies within the local area after release. After 24 hours, contractors must return to the unit's designated dispatch point.

Equipment Ordering Procedures Refer to RMG Chapter 40.

Engines and Water Tenders

The tables list the NWCG type minimum requirements for engines and water tenders. Please use these types when requesting engines and water tenders.

Engine ICS Typing

Requirements	Engine Type						
	Structure				Wildland		
	1	2	3	4	5	6	7
Tank minimum capacity (gal)	300	300	500	750	400	150	50
Pump minimum flow (gpm) @ rated pressure (psi)	1000	500	150	50	50	50	10
Hose 2½"	1200	1000	—	—	—	—	—
1½"	500	500	1000	300	300	300	—
1"	—	—	500	300	300	300	200
Ladders per NFPA 1901	Yes	Yes	—	—	—	—	—
Master stream 500 gpm min.	Yes	—	—	—	—	—	—
Pump and roll	—	—	Yes	Yes	Yes	Yes	Yes
Maximum GVWR (lbs.)	—	—	—	—	26,000	19,500	14,000
Personnel (min)	4	3	3	2	2	2	2

— = Not applicable, NFPA = National Fire Protection Association, GVWR = gross vehicle weight rating.

Water Tender ICS Typing

Requirements	Water Tender Type				
	Support			Tactical	
	S1	S2	S3	T1	T2
Tank Capacity	4,000	2,500	1,000	2,000	1,000
Pump minimum flow (gal/min)	300	200	200	250	250
At rated pressure (psi)	50	50	50	150	150
Maximum refill time (minutes)	30	20	15	–	–
Pump and roll	–	–	–	Yes	Yes
Personnel (minimum)	1	1	1	2	2

— = Not applicable

Note:

1. All types shall meet Federal, state, and agency requirements for motor vehicle safety standards, including all gross vehicle weight ratings (GVWR) when fully loaded.
2. Type 3 engines and tactical water tenders shall be equipped with a foam proportioner system.
3. All water tenders and engine Types 3 through 6 shall be able to prime and pump water from a 10-foot lift.
4. Personnel shall meet the qualification requirements of NWCG’s National Interagency Incident Management System: Wildland Fire Qualification System Guide (PMS 310-1, October 2015).

Common Additional Needs for Engines and Tenders (Request As Needed):

- All-wheel drive (includes four-wheel drive)
- High-pressure pump (250 psi at one-half flow of Type)
- Foam proportioner
- Compressed Air Foam System (CAFS) 40 ft3/min minimum
- Additional personnel

Engines

GPC Coordinating Group participating agencies own and operate a variety of engines. These resources are listed below by agency, type, and location.

Engine Staffing

Rocky Mountain Area Engines ordered for incidents within the RMA will be staffed with a minimum of three personnel. Engines responding to their respective jurisdictions within the RMA may be staffed to their agency/local minimum standards

Although the national standard staffing for most engines is two personnel, all engines orders shall specify the staffing deemed appropriate to ensure firefighter

safety. In most instances, it will be necessary to specify 3 personnel on Type 4-7 engines to ensure that the principles of LCES (Lookouts, Communication, Escape Routes and Safety Zones) are adequately met.

Strike Teams: Engines

Only orders for Single Engines will be processed through dispatch channels. Strike Teams and Task Forces will be formed at the local level. When strike teams are ordered, the local dispatch office will be responsible for assigning individual "E" request numbers to each of the five engines making up the team. Dispatch will verify if a Strike Team Leader (STEN) is needed. If a STEN is needed, Dispatch will assign an "E" and an "O" request number.

Agency

Unit	T 1	T 2	T 3	T 4	T 5	T 6	T 7
SD-BIA	-	1	-	2	-	23	-
SD-BKF	-	-	3	3	-	13	-
SD-NPS	-	-	1	-	-	6	1
SD-SDS*	-	-	1	2	-	10	-
SD-USFWS	-	-	-	1	-	3	-
ND-BIA	-	-	-	-	-	3	-
NE-BIA	-	-	-	-	-	2	-
NE-NBF	-	-	-	-	-	7	2
NE-NPS	-	-	-	-	-	2	-
NE-USFWS	-	-	-	-	-	4	5
WY-CRX	-	-	-	1	-	-	-
WY-NPS	-	-	-	-	-	-	-
Total	-	-	5	12	-	78	8

Cooperators

Unit	T 1	T 2	T 3	T 4	T 5	T 6	T 7
NE-VFD**	-	-	-	-	-	5	-
SD-VFD**	100	27	33	30	15	168	34
Total	100	27	33	30	15	173	34

* SD-SDS totals include Custer State Park and GFP

** Volunteer Engines available as Call When Needed (CWN)

Contractor Resources

(See Dispatch Priority Lists located on the following website: <http://www.fs.fed.us/business/incident/dispatch.php>. Contracted resources are also listed in ROSS as part of the new VIPR-ROSS interface.) Contracted resources will be displayed in the VIPR tab in ranking order on the pending request screen in ROSS.

Tenders

GPC Coordinating Group participating agencies own and operate a variety of water tenders. These resources are listed below by agency, type, and location.

Agency

Unit	Support T 1	Support T 3	Support T 4
SD-BIA	-	2	1
SD-NPS	1	1	-
SD-SDS*	-	1	
NE- USFWS	-	1	-
Total	1	5	2

Cooperators

Unit	Tactical		Support			
	T 1	T 2	T 1	T 2	T 3	T 4
SD-VFD**	7	10	4	25	42	5
Total	7	10	4	25	42	5

* SD-SDS calculations include Custer State Park and GFP

** Volunteer Engines available as Call When Needed (CWN)

Equipment

Unit Location	ID #	Type	Kind	Radio
BKF -				
Hill City	6027	D6NXL Dozer 145 hp	2008 Cat	Yes
Hill City	5240	D6RXL Dozer 185 hp	2004 Cat	Yes
Hill City	4437	Tractor	2000 International	Yes
Hill City	4108	50-Ton Lowboy	1999 Klayne	No
Hill City	6451	25-Ton Trailer	2010 Trail Eze	No
Hill City	5643	Dump Truck	2006 International	Yes
Hill City	5644	Motor grader	2006 Cat	No
Hill City	6211	Motor grader	2008 Volvo	No
Hill City	5241	Backhoe	2004 Cat	No
Hill City	6028	25 Ton Trailer	2008 Mc Elrath	No
Hill City	5854	Dump Truck	2007 International	Yes

SDS -				
Rapid City	SDWF S-6	Safety/IT	Forest River	No
Rapid City	SDWF S-2	Plans Trailer	Featherlite	No
Rapid City	SDWF S-3-2	Information Trailer	Forest River	No
Rapid City	SDWF S-03-1	Finance Trailer	Feather Lite	No
Rapid City	SDWF S-13	Hose Trailer	Johnson Furance	No
Rapid City	SDWF S-1	IC	Trail-Lite	
Rapid City	DQ 021	Tractor	1993 West. Star	Yes
Rapid City	SDWF S-4	35-Ton Trailer W/ winch	2006 Dual-lite	No
Rapid City	SDWF S-11	10-Stall shower unit	Trailer	No
Rapid City	SD Dozer 1	T-3 Dozer 95 hp	2005 Komatsu	Yes
Rapid City	SDWFS -10	Cache Van Trailer	Wabash DFRP	No
Rapid City	SDWF S-5	Operations Trailer	Forest River	
Rapid City	SDWF S-9	Logistics Trailer	Forest River	Yes
Rapid City	SDWF S-21	8x18 Flatbed Trailer	Diamond C	No
Rapid City	SDWF S-20	Camp Support Cargo Trailer	H&H	No

Contract Resources

(See Dispatch Priority Lists located on the following website:

<http://www.fs.fed.us/business/incident/dispatch.php>. Contracted resources are also listed in ROSS as part of the new VIPR-ROSS interface.)

Contracted resources will be displayed in the VIPR tab in ranking order on the pending request screen in ROSS.

See RMG Chapter 40 for definitions of:

- Cooperators
- Contractors,
- Solicitations,
- Agreements,
- Competitive,
- Non-competitive,
- At-incident EERAs,
- Dispatch Priority, and DPL
- Critical documentation and
- Resource Ordering and Status System (ROSS)

Emergency Equipment Rental Agreements (EERA's)

Commercial vendor's heavy equipment may be signed up locally on incident only EERA's after all other resources are committed. Refer to Great Plains Interagency Incident Service and Supply Plan for current list of vendors.

Retardant Plants

Portable/Mobile Retardant Bases Refer to RMG Chapter 40

Specialized Equipment Refer to RMG Chapter 40

Heli-torches (Aerial Drip Torch) Refer to RMG Chapter 40

National Incident Smoke Monitor Support Cache (NISMSC)
Refer to RMG Chapter 40

Aerial Ignition Devices (Plastic Sphere Dispensers) Refer to RMG Chapter 40

Terra Torches Refer to RMG Chapter 40

Batch Mixer Refer to RMG Chapter 40

Seed Buckets Refer to RMG Chapter 40

Potable Water Tenders Refer to RMG Chapter 40

Mobile Cache Support Van NFES #8602 Refer to RMG Chapter 40

Heavy Truck Transportation Refer to RMG Chapter 40

