CHAPTER 50
AIRCRAFT

Aircraft Operations

Aviation resources are used for preparedness activities, supporting emergency incident operations, burn area rehabilitation projects, resource management project work, and administrative movement of resources. Requests for aircraft will be for official use and within agency policy.

Reminder: *Most aviation resources are considered initial attack (IA) resources and are subject to diversion at any time for higher priority incidents based upon consideration of safety and values at risk. Orders for these aviation resources should be based on actual current incident needs.*

Aircraft Mobilization

Ordering Procedures

All aircraft orders should be coordinated through GPC.

The use of air attack and/or lead planes/ASM is critical for safe and effective support and should be ordered when needed.

Between the hours of 2000 and 0600, pilots shall not be dispatched or contacted to ensure crew rest requirements are met (10 hours of uninterrupted rest). Orders for charter aircraft should not be placed with vendors between these hours, unless they have a separate dispatcher available. Pilots should ensure duty limitations are being met**.**

Use of the Aircraft Dispatch Form ("Kneeboard") or equivalent is the preferred method of mobilization of tactical aircraft for initial attack. ROSS orders for aircraft will follow in a timely manner.

Ordering Tactical Aircraft

Orders for **tactical aircraft** should include the following minimum information, and this information will be communicated to the pilots:

- Latitude / Longitude (D,dM)
- Frequencies
  - Air to Air
  - Air to Ground (with name of ground contact)
- Any Hazards in the area
- Other aircraft in the area and/or ***mobilizing to*** the area.
  - Special care should be taken if response is within 5 miles of dispatch boundaries, refer to local dispatch boundary agreements.

- Reload base as applicable
- Name of ordering Dispatch Center
- Type of Resource requested
- TFR – yes or no

Notify RMACC of the commitment and release of national and area resources.

Initial Attack Load (Refer to NMG Chapter 50)

Aircraft Demobilization (Refer to NMG Chapter 50)

Flight Management Procedures (Refer to NMG Chapter 50)

Types of Flights

Point-to-Point:
Point-to-Point flights originate at one developed airport or permanent helibase, with a direct flight to another developed airport or permanent helibase. These types of flights are sometimes referred to as "administrative" flights. The pilot and aircraft must be agency-approved (carded) for these point-to-point flights.

A point-to-point flight is conducted higher than 500 feet above ground level (AGL) except for takeoff and landing. Flight following and tracking is normally accomplished via an FAA (VFR or IFR) Flight Plan, filed by the pilot, along with the 9400-1a form, and follow-up phone calls to the appropriate dispatch center when flights commence and/or terminate. Pre-positioning of tactical aircraft falls into this category.

Mission Flights:
Mission flights are defined as flights not meeting the definition of a point-to-point flight. A mission flight requires work to be performed in the air (retardant or water delivery, fire reconnaissance, smokejumper delivery), or through a combination of ground and aerial work (delivery of personnel and/or cargo from helibases to helispots or unimproved landing sites, rappelling or cargo let-down, horse herding).

For additional specific information, refer to the 2017 Interagency Standards for Fire and Aviation chapter 16 pages 322-323 (https://www.nifc.gov/PUBLICATIONS/redbook/2017/chapter16.pdf).

Agency Flight Plans and Flight Following (Refer to NMG Chapter 50)

Aircraft Flight Request/Schedule Form:

The DOI Flight Request/Schedule Form (**Form 9400-1a May 1993**) has been adopted as the national interagency standard dispatch form for **all point-to-point flights**. The completed form will be forwarded to all the affected parties. This form should be filled out accurately and thoroughly, as it contains critical information that may be needed in emergency situations. (i.e.: # of passengers, pilot name(s) and contact #, color of a/c, etc.) As a reminder, do not count the pilot as a passenger in the passenger block.

Sterile Cockpit:
Upon takeoff and landing, pilots must concentrate on FAA communications and traffic awareness. Dispatch communications may remain unanswered during these operations. Contact will be established/re-established once practical and safe. Sterile cockpit duration may vary depending on airspace and communications complexity. In general, count on five nautical miles as a sterile cockpit guideline. **Dispatchers should refrain from attempting contact within this parameter.**

Many federally-procured aircraft by contract must be equipped with Automated Flight Following (AFF). AFF can mitigate tracking issues during sterile cockpit operations.

Dispatchers should be thoroughly familiar with their Agency's Aviation Operation Plans to facilitate efficient and safe dispatch of aircraft.

For Helicopters, sterile cockpit also occurs after the helicopter pilot has made radio contact with ground personnel for current ground conditions prior to landing or initiating mission operations.

There are times that there is no ground contact at the remote helispot, if it is being used for the first time or used intermittently. There should be no talking in the aircraft during takeoff and /or landing unless the pilot requests input on clearance or hazards.

Local Flight Following Policy

GPC Flight Following Policy is established on the guidelines set forth in Interagency Aviation Safety Alert Number IA 06-05 dated 3 October 2006. In the interest of flight safety, nothing in this Section precludes any party from requesting or negotiating any Flight Following provisions that meet or exceed those provided for therein

At a *minimum*, all provisions of the current year's NMG and Interagency Aviation Safety Alert Number IA 06-05, dated 3 October 2006, will be strictly adhered to.

Note: Both Directives are effective until rescinded or superseded.

If the Automated Flight Following (AFF) System is deemed to be functioning normally, the Aircraft Dispatcher will flight follow aircraft under GPC responsibility in accordance with the pertinent directives cited above. Unless otherwise agreed, voice communication will be required:

1. At take-off or when transitioning from another jurisdiction,
2. An "Operations Normal" check at 30 minute intervals while in-flight,
3. Upon landing or when transitioning to another jurisdiction, or
4. At any time that Dispatch or the subject aircraft deviates from the preplanned mission or purpose of the flight.

If there exists any doubt concerning the veracity, accuracy or reliability of AFF, proceed to Flight Follow manually using 15-minute voice check-ins. Minimum

information provided at each check-in will consist of the latitude, longitude and heading of the subject aircraft.

> AFF may still be used to maintain "Situational Awareness", but will in no way be used for Flight Following if there is any doubt concerning its performance!

In all cases, the following information will be entered into the Flight Following Log for each aircraft under our responsibility, at intervals not to exceed 15 minutes:

1. Time
2. Latitude and Longitude
3. Heading

The Aircraft Dispatcher will continually monitor AFF for any sign of performance degradation, such as:

1. Displaying erroneous status information for known aircraft.
2. "Locking-up" – not updating positions and data at regular intervals.
3. Unexplained or numerous "Lost Contact" indications.

If any performance degradation is noted, the Aircraft Dispatcher will immediately notify all aircraft currently being flight followed and transition to manual Flight Following. Manual Flight Following will continue until the return of AFF to normal and reliable operation has been confirmed

Aircraft Accident/Incident Reporting

Refer to current local unit emergency procedures.

Overdue and Missing Aircraft

If an aircraft fails to arrive at its destination or fails to check-in on the prescribed interval, initiate the Interagency Aviation Mishap Response Guide.

Forest Service Owned/Leased Aircraft (Refer to RMG Chapter 50)

State Owned Aircraft

South Dakota State Aviation Resources (SDS)

State of South Dakota Department of Transportation (DOT) occasionally has 2 King Air 90s available for interagency use under cooperative fire agreements through the South Dakota Division of Wildland Fire, provided an interagency letter of approval has been issued. However, the use of these aircraft is primarily restricted within South Dakota and neighboring states or within the Great Plains Interstate Fire Compact member states.

The SDS DOT King Air 90s are ordered through the Great Plains Interagency Dispatch Center. The aircraft are based out of Pierre, SD and may be prepositioned as needed during local fire activity.

Costs

Aircraft	Call Sign	Flight Rate/Hour	Daily Availability	F.O.R. per Day	Cruise Speed
Beechcraft KA-C90A	N90SD	*$1500	*$1000	No Standby	240 knots/hr.
Beechcraft KA-C90A	N773SD	*$1500	$1000	No Standby	240 knots/hr.

*Rates are subject to change.

Use and Capabilities

Make/Model	Beechcraft KA-90C
Use	Air Attack, Passenger Transport, Recon
Fuel Type	Jet-A
Range (w/reserve)	5 Hours
Max. Take-off Weight	10,100 lbs.
Runway (accelerate-stop distance)	*5,600’ @ max. takeoff weight/5,500’ @ MSL @ 30 C
Single Engine Rate of Climb	253’ per minute @ max. take-off weight @ 20 C
Single Engine Service Ceiling	*8,800’ @ max. weight @ 20 C
Ground Power Unit (less than 500/100 AMPs)	Not Required
Avionics Typing	1

*Varies with weight, temperature and altitude.

Vendor Fixed-Wing Aircraft

Call When Needed (CWN) or On-Call: Vendor owned aircraft that are contracted as needed for a specific mission. The USFS calls these aircraft “call when needed) and the DOI agencies call these aircraft “on call”.

USFS Approved Vendors

USFS Region 2 CWN contracts have been awarded for the procurement of tactical, reconnaissance, cargo and passenger fixed-wing aircraft. Contact the RMACC Aircraft desk for information.

DOI/OAS Approved Vendors

A listing of DOI/OAS approved vendors, aircraft, and pilots can be found at the following website: https://www.doi.gov/aviation/aqd/contracts and is only available to DOI employees**.**

Reference the appropriate DOI On-Call Air Tactical Fixed Wing Contract or Aircraft Rental Agreement (ARA) when contacting vendors for fixed-wing aircraft procurement. ARA agreements are not authorized for fire orders for more than one day. ARA contracts can be used for reconnaissance as long as it is under $25,000.

All Vendor Aircraft Contracting

Contracted aircraft are inspected and carded by the Office of Aviation Services (OAS) and/or the United States Forest Service (USFS). They are available for interagency use and will be requested through established ordering channels.

Documentation in ROSS at the time of hire must include which contract the aircraft is hired under (i.e. USFS Region 2 CWN or DOI On-Call) as well as be communicated with the vendor hiring official/pilot and flight manager.

Smokejumper Initial Attack Ordering (Refer to RMG Chapter 50)

Smokejumper Aircraft

(Refer to NMG chapter 50
https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf)

Lead Planes (LP)

(Refer to NMG chapter 50
https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf)

Lead planes are national initial attack resources. They are ordered through normal dispatch channels and can be diverted to a higher priority incident.

The IC and/or the ATGS has the discretion to request a Lead plane/Aerial Supervision Module (ASM) anytime they deem it necessary to evaluate drops in difficult terrain prior to requesting an airtanker, etc. If needed to go below 500 feet, a lead plane or ASM must be ordered. (Refer to the RMA Aerial Supervision Requirements chart found later in this chapter.)

All lead plane pilots are MAFFS and VLAT qualified.

Refer to http://www.nifc.gov/nicc/logistics/aviation/aviation.htm for a detailed list.

Lead plane call signs initiate with “Lead”. Example: L-28 = Lead Two Eight

Lead planes should always be filled with a roster in ROSS.

Aerial Supervision Modules (ASM)

(Refer to NMG chapter 50

https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf)

An ASM is a two person crew functioning as the Lead and ATGS (Air Tactical Group Supervisor) on the same aircraft. The ASM crew is qualified in their respective positions and has received additional training and authorization.

An ASM can perform the functions of a low-level lead [lane operation, traditional air attack, or both, depending on the needs of incident management personnel.

An ASM consists of an Air Tactical Pilot (ATP) and Air Tactical Supervisor (ATS).

Air Tactical Pilot:
The ATP is a qualified lead plane pilot who has received specialized training and authorization to function as an ASM crewmember. The ATP functions as the lead plane pilot and utilizes Crew Resource Management (CRM) skills to evaluate and share the incident workload with the ATS.

Air Tactical Supervisor:
The ATS is a qualified ATGS who has received specialized training and authorization to function as an ASM crewmember. The ATS is an ATGS who also utilizes CRM to evaluate and share the incident workload with the ATP.

All ASM pilots are MAFFS and VLAT qualified.

Refer to http://www.nifc.gov/nicc/logistics/aviation/aviation.htm for a detailed list.

Call signs for ASMs initiate with “Bravo”. Example: B-28 = Bravo Two Eight.

ASMs should always be filled with a roster in ROSS.

Ordering Considerations for Lead Planes/ASM which should be noted in Special needs:

- Launch timeframe considerations
    - Arriving at incident before airtanker, especially for Next Generation airtankers.
- MAFFS - qualified LP required
- VLAT - qualified LP required

Aerial Supervision Requirements in the RMA – use 2017 IASG national chart

When aerial supervision resources are co-located with retardant aircraft, they should be launched together on the initial order to maximize safety, effectiveness, and efficiency of incident operations. Incidents with 3 or more aircraft over/assigned to them should have aerial supervision over/assigned on the incident. Federal policy dictates additional requirements as listed below.

Situation	Lead Plane / ASM	ATGS
Airtanker not initial attack (IA) rated	Required	--
MAFFS	Required	--
Very Large Airtanker (VLAT)	Required	--
When requested by airtanker, ATGS, LP, ATCO or ASM	Required	Required
Foreign Government airtankers	Required if no ATGS	Required if no Lead/ATCO/ASM
Multi-engine Airtanker: Retardant drops conducted between 30 minutes prior to, and 30 minutes after sunrise, or 30 minutes prior to sunset to 30 minutes after sunset.	Required if no ATGS	Required if no Lead/ATCO/ASM
Single Engine Airtanker (SEAT): SEATs are required to be "on the ground" by ½ hour after sunset.	See Level 2 SEAT requirements	See Level 2 SEAT requirements
Level 2 SEAT requirements: Level 2 rated SEAT operating over an incident with more than one other tactical aircraft on scene.	Required if no ATGS	Required if no Lead/ATCO/ASM
Retardant drops in congested/urban interface areas	Order	May use if no Lead/ATCO/ASM
Periods of marginal weather, poor visibility or turbulence	Order	Order
Night helicopter weather dropping operations – 2 or more tactical or non-incident helicopters	Not Applicable	Order

Definitions of Key Aerial Supervision Terms:

Required:
Aerial supervisory resource(s) that shall be over the incident when specified air tactical operations are being conducted.

Ordered:
Aerial supervisory resources shall be ordered by the controlling entity. (Air

tactical operations may be continued while the aerial supervision resource is enroute to the incident. Operations can be continued if the resource is not available.)

Assigned:
Tactical resource allocated to an incident. The resource may be flying enroute to and from, or on hold at a ground site.

Ordering Considerations for Aerial Supervision and other Fixed Wing:

- Aerial supervision resources will be dispatched, when available, for initial and extended attack to enhance efficiency and safety of ground and aerial operations.
- Communication and coordination is critical to the efficient use of aerial supervision resources due to faster mobilization of new generation aircraft.
- Oxygen requirements –(Refer to RMG Chapter 50)
- **Flight Condition Guidelines** – Aerial Supervision personnel must carefully evaluate flight hazards, conditions (visibility, wind, thunderstorm cells, turbulence, and terrain) to ensure that operations can be conducted in a safe and effective manner. The following policies and guidelines are designed to do this:
    - **Visibility** – Regardless of time of day, when poor visibility precludes safe operations, flights will be suspended. It is recommended that incident aircraft fly with landing and strobe lights on at all times. It is required that lead planes fly with landing/impulse and strobe lights on at all times. Regular position reporting is critical in marginal visibility conditions.
    - **Wind Conditions** – Moderate to high winds and turbulent conditions affect flight safety and water/retardant drop effectiveness. The following guidelines should be considered in making the decision to continue or suspend operations. A number of factors including terrain, fuel type, target location, resources at risk, cross-winds, etc. must be considered:
        - **Heavy Airtanker Drops**:
            - Generally ineffective in winds over 20-25 knots (23-29 mph)
        - **SEAT Operations**
            - Generally ineffective in wind over 15-20 knots (17-23 mph) Operations shall be suspended when sustained winds are 30 knots (34 mph) or the gust spread is 15 knots (17 mph)
        - **Helicopter Drops**

- Generally ineffective in winds over 25-30 knots (29-34 mph)

Tactical and Reconnaissance Aircraft (Refer to RMG Chapter 50)

Airtankers (Refer to NMG chapter 50)

https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf)
NICC, RMACC and/or RMA dispatch centers shall retain control of air tankers during incidents and have authority to divert airtanker(s) to initial attack situations based on threat to life, property, or resource values. Incidents affected by diverts must be informed by the local dispatch center. Critical items listed earlier under the *Ordering Tactical Aircraft* section must be provided as well as for any diversions from the original order.

There are five (5) types of airtankers:

Type	Capacity (Minimum)
VLAT	8,000 gallons or more
1	3,000 to 7,999 gallons
2	1,800 to 2,999 gallons
3	800 to 1,799 gallons
4	Up to 799 gallons

When RMACC has depleted available large airtanker (Types 1, 2 & VLAT) resources, request(s) will be placed with NICC. Large airtanker initial attack agreements between neighboring unit level dispatch centers are valid only where proximity allows the airtanker to respond loaded direct to the incident.

NICC will prioritize and allocate federal airtankers by positioning them in areas of current or predicted high wildfire danger or activity.

Ordering Considerations for Airtankers which should be noted in Special needs:

- Values at risk (see RMG chapter 10)
- Distance from the fire and anticipated timeframes to the values at risk based on current and expected weather.
- Loaded or empty – 2 hour maximum flight when loaded, except for the VLATs
- Location of the reload base
- Is the reload base approved for VLAT or MAFFS?
- Is a lead plane/ASM is required for VLAT and MAFFS?

An order for an airtanker may be filled by a VLAT due to ATB rotation. However this will not occur without dialogue between NICC, RMACC and the

ordering unit. Documentation and dialogue will be critical for a positive outcome in these scenarios, especially if the ordering unit is not able or willing to accept a VLAT.

Airtanker Management (Refer to RMG chapter 50)

Airtanker Dispatch Limitations (Refer to RMG chapter 50)

RMA Air Tanker Bases (ATB) / Reload Bases

Airport	**Name**	**Dispatch Center/Hosting Agency**	**Dates***
DRO	Durango ATB	DRC/USFS	May 15 – Sept 30
BJC	Jeffco ATB	FTC/USFS	All year, Wntr. 3hr. set up
GJT	Grand Junction ATB	GJC/BLM	April 15 – Sept 30
RAP	Rapid City ATB	GPC/USFS	June 1 – Sept 30
PUB	Pueblo Reload Base	PBC/USFS	May 1 – Sept 30
CPR	Casper Reload Base	CPC/BLM	As needed/temporary

(CPR requires activation /ordering of a mobile retardant base)

*Dates are subject to change due to fire activity

RMA VLAT Approved Airports

Airport	Name	Comments
CPR	Casper, WY	Current agreement good through 2017
COS	Colorado Springs, CO	Pending agreement as of April 1, 2017

(COS requires activation /ordering of a mobile retardant base)

For information regarding Airtanker Base capabilities and contact information, refer to the Interagency Airtanker Base Directory (PMS 507/NFES 002537). This publication is prohibited from internet posting due to sensitive airport frequency info.

Modular Airborne Firefighting Systems (MAFFS)

(Refer to NMG chapter 50 https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf)

MAFFS Airlift Wings in the RMA

Peterson Air Force Base, CO
COS Federal-Air National Reserve 2 C-130

Cheyenne, WY
CYS State-Air National Guard 2 C-130

Refer to the USFS MAFFS Operating Plan for more information with the following link:
https://www.nifc.gov/nicc/logistics/references/MAFFS_Operations_Plan.pdf

MAFFS Approved Reload Bases in the RMA

DRO	Durango ATB	DRC/USFS
BJC	Jeffco ATB	FTC/USFS
GJT	Grand Junction ATB	GJC/BLM
RAP	Rapid City ATB	GPC/USFS
PUB	Pueblo Reload Base	PBC/USFS

Water Scoopers (Refer to NMG chapter 50)
https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf)

Single Engine Air Tankers (SEAT)

The State of South Dakota will have one or more SEAT's (AT-802 or other Type III) under State Contract for **2017**. This contract SEAT(s) will be assigned to one of the prepared SEAT bases as conditions dictate. Prepared SEAT bases will be located at Hot Springs (HSR), Lemmon (LEM), Pierre (PIR), and Buffalo (9D2), SD. The appropriate SEAT base(s) will be staffed as required by current activity.

(For current SEATs on contract refer to the Miscellaneous Aircraft Information folder, SEAT tab)

The State of Nebraska will have one SEAT under State Contract for **2017**. When a SEAT is needed for a fire or to fill a severity order, this Contract SEAT will be assigned to one of the prepared SEAT Bases as conditions dictate. Prepared SEAT bases will be located at Valentine (VTN), Chadron (CDR), and Alliance (AIA), NE. Pending upon completion, Scottsbluff (BFF), NE will join this active list. The appropriate SEAT Base(s) will be staffed as required by current activity.

(For current SEATs on contract refer to the Miscellaneous Aircraft Information folder, SEAT tab)

SEAT Base Category I and II Definitions (per ISOG) (Refer to RMG chapter 50)

Large Transport Aircraft (Refer to RMG chapter 50)

Passenger/Cargo Manifests (Refer to RMG chapter 50)

Helicopters

Exclusive Use Helicopters (Refer to RMG Chapter 50)

USFS CWN and/or DOI On-Call Helicopters (Refer to RMG Chapter 50)

GPC Exclusive use Contract Helicopters

There will be an interagency exclusive use helicopter based at the Custer County Airport (CUT) from June to September depending on fire danger and activity. The agencies listed in the Cooperative Helicopter Agreement and Annual Operating Plan are as follows: Black Hills National Forest & Wind Cave National Park. These cooperators will have priority over other cooperators within our zone of influence. The helicopter will be ordered through GPC.

Military Aircraft (Refer to RMG Chapter 50)

Nebraska Army National Guard

Nebraska Army National Guard helicopters are located in Lincoln, Nebraska. Their mission purpose is limited to emergency life-saving missions and/or wildland fire suppression activities as specified in the Nebraska Interagency Cooperative Fire Management Agreement.

The Nebraska National Guard is responsible for maintaining and providing state assets on ground and aerial wildfire suppression personnel and equipment when authorized by proclamation of the Governor under the Nebraska Emergency Management Act. All orders are placed thru GPC and then GPC will order through NEMA. A request for a Type 1 CWN helicopter and a Helicopter Manager (HMGB) must be placed to RMACC if used on federal lands, and it is recommended that a HMGB be ordered any time you order a Black Hawk.

South Dakota Army National Guard

South Dakota Army National Guard (SDNG) Helicopters are located at the Rapid City Regional Airport (RAP) in Rapid City, South Dakota. The mission purpose is limited to emergency life-saving missions and/or wildland fire suppression activities as specified in the Memorandum of Understanding between the SDNG and the US Forest Service. Only the UH-60M Black Hawks are equipped for bucket work. There will normally be two Black Hawks available for fire dispatch throughout the summer, though the actual aircraft may change during the course of the fire season. The UH-72A Lakotas are available for personnel transport at this time.

***Certification of Non-Contract Aircraft and Pilots**

As requested, Aviation Management has reviewed and approved the following aircraft and pilots for use only in the transportation of personnel and for the specific purpose as shown below:

> **Purpose**: Emergency Life Saving Missions and/or Wildland Fire Suppression Activities as specified in the South Dakota Interagency Cooperative Fire Management Agreement
>
> **Approved Aircraft**: See Miscellaneous Aircraft Information book, SDNG tab
>
> **Approved Pilots**: 1500 Hours Minimum

(For current Aircraft IP's & Commanders refer to the Miscellaneous Aircraft Information book, SDNG tab)

*See current years certification to verify IP's and tail numbers

Ordering Procedure

The Incident will place all Black Hawk orders with GPC, and GPC will order the helicopter(s) from the SDNG. It is *mandatory* for any Incident on Federal lands that GPC will place a request with RMACC for one CWN Type 1 Helicopter and a HMGB to back up the use of each Black Hawk assigned. The region cannot fill the request for the National Type 1 Helicopter(s) unless the HMGB request has been filled as well.

Wyoming Army National Guard

Wyoming Army National Guard helicopters are located in Cheyenne, Wyoming. Their mission purpose is limited to emergency life-saving missions and/or wildland fire suppression activities as specified in the Wyoming State Interagency Cooperative Fire Management Agreement.

All orders for Wyoming National Guard aircraft for federal jurisdiction fires will be placed with WY State Forestry, Duty Officer or RMACC as the point of contact with the Wyoming National Guard. RMACC will activate the Wyoming National Guard resources through the Wyoming Emergency Management Agency. The Wyoming State Forestry Division may request activation of Wyoming National Guard resources for state and private land fires within Wyoming with follow-up notification to the appropriate zone dispatch center and RMACC. Commercial resources must be evaluated for reasonable availability prior to National Guard activation. A request for a Type 1 CWN helicopter and a Helicopter Manager (HMGB) must be placed to RMACC if used on federal lands, and it is recommended that a HMGB be ordered any time you order a Black Hawk.

*** Certification of Non-Contract Aircraft and Pilots**

As requested, aviation management has reviewed approved aircraft and pilots for use only in the transportation of personnel and for the specific purpose as shown below:

Purpose: Emergency Life Saving Missions and/or Wildland Fire Suppression Activities as specified in the Wyoming Interagency Cooperative Fire Management Agreement.

Approved Aircraft: See Miscellaneous Aircraft Information book Rotor Wing tab

Approved Pilots: (For Aircraft IP's & Commanders, bucket PC refer to Miscellaneous Aircraft Information book Rotor Wing tab)

*See current years certification to verify IP's and tail numbers

Military Training Routes & Special Use Airspace (Refer to NMG Chapter

50)

Unmanned Aircraft Systems

(Refer to Interagency Standards for Fire and Fire Aviation Operations chapter 16 page 319-321 https://www.nifc.gov/PUBLICATIONS/redbook/2017/chapter16.pdf)

Also (Refer to RMG chapter 50)

Aircraft Services

Temporary Flight Restrictions (TFR) (FAR 91.137)

(Refer to NMG chapter 50 https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf and the Interagency Airspace Coordination Guide chapter 6 (http://www.airspacecoordination.net/guide/asguide_full.pdf)

Airborne Thermal Infrared (IR) Fire Mapping

An infrared flight service can be ordered through the GACC using an Infrared Scanner Request, accompanied by a ROSS Request (Aircraft / Service – Aviation / Service – Infrared Flight). Requests must be into NIC by 1530 Mountain Time. Forms for infrared flights will be created at the National Infrared Operations (NIROPS) website at http://nirops.fs.fed.us/rcr/scanner/index.php.

FAA Temporary Control Tower Operations

(Refer to NMG chapter 50 https://www.nifc.gov/nicc/mobguide/chapter%2050.pdf)

Dedicated Radio Frequencies and Management (Refer to NMG Chapter 50)

Aviation Frequencies

Air to Air

1. SD Zone 1 (NW / Dupree)	119.4250 N
2. **SD Zone 2 (SW / Philip)**	**119.3750 N**
3. SD Zone 3 (NE / Aberdeen)	125.3750 N
4. SD Zone 4 (SE / Mitchell)	135.4250 N
5. NE A/A1	126.8250 N
6. NE A/A2	128.7000 N
7. WY Zone 3 (NE corner)	118.9500 N

Air to Ground

South Dakota

1. Black Hills NZ	A/G 35	167.2250 N

2. Black Hills CZ	A/G 31	166.7875 N
3. Black Hills SZ & WCP & CSP	A/G 24	168.6375 N
4. NBF & BDP	A/G 25	168.7500 N
Wyoming		
Black Hills BL & CRX & WEX	A/G 35	167.2250 N
Nebraska		
The Whole State	A/G 25	168.7500 N
GPC ZONE WIDE		
VMED 28	(TX Tone 156.7)	155.3400 N

Flight Following and Emergency

1. Forest Net	(TX Tone 103.5)	169.1750 N
2. National Flight Following	(TX/RX Tone 110.9)	168.6500 N
3. Air Guard	(TX Tone 110.9)	168.6250 N

Time Conversion Tables

Standard Time

Alaskan	Pacific	*Phoenix	Mountain	Central	Eastern	Zulu
1500	1600	1700	1700	1800	1900	0000
1600	1700	1800	1800	1900	2000	0100
1700	1800	1900	1900	2000	2100	0200
1800	1900	2000	2000	2100	2200	0300
1900	2000	2100	2100	2200	2300	0400
2000	2100	2200	2200	2300	0000	0500
2100	2200	2300	2300	0000	0100	0600
2200	2300	0000	0000	0100	0200	0700
2300	0000	0100	0100	0200	0300	0800
0000	0100	0200	0200	0300	0400	0900
0100	0200	0300	0300	0400	0500	1000
0200	0300	0400	0400	0500	0600	1100
0300	0400	0500	0500	0600	0700	1200
0400	0500	0600	0600	0700	0800	1300
0500	0600	0700	0700	0800	0900	1400
0600	0700	0800	0800	0900	1000	1500
0700	0800	0900	0900	1000	1100	1600
0800	0900	1000	1000	1100	1200	1700
0900	1000	1100	1100	1200	1300	1800
1000	1100	1200	1200	1300	1400	1900
1100	1200	1300	1300	1400	1500	2000
1200	1300	1400	1400	1500	1600	2100
1300	1400	1500	1500	1600	1700	2200
1400	1500	1600	1600	1700	1800	2300

*Although Arizona is included in the Mountain Time Zone, The Phoenix Sub-Zone does not observe Daylight Saving Time. The Phoenix Sub-Zone includes

all of AZ except the Navajo Nation in the NE corner of the state. During the winter months, all of Arizona is on the same time as the rest of the Mountain Time Zone.

Daylight Saving Time

Alaskan	Pacific	*Phoenix	Mountain	Central	Eastern	Zulu
1600	1700	1700	1800	1900	2000	0000
1700	1800	1800	1900	2000	2100	0100
1800	1900	1900	2000	2100	2200	0200
1900	2000	2000	2100	2200	2300	0300
2000	2100	2100	2200	2300	0000	0400
2100	2200	2200	2300	0000	0100	0500
2200	2300	2300	0000	0100	0200	0600
2300	0000	0000	0100	0200	0300	0700
0000	0100	0100	0200	0300	0400	0800
0100	0200	0200	0300	0400	0500	0900
0200	0300	0300	0400	0500	0600	1000
0300	0400	0400	0500	0600	0700	1100
0400	0500	0500	0600	0700	0800	1200
0500	0600	0600	0700	0800	0900	1300
0600	0700	0700	0800	0900	1000	1400
0700	0800	0800	0900	1000	1100	1500
0800	0900	0900	1000	1100	1200	1600
0900	1000	1000	1100	1200	1300	1700
1000	1100	1100	1200	1300	1400	1800
1100	1200	1200	1300	1400	1500	1900
1200	1300	1300	1400	1500	1600	2000
1300	1400	1400	1500	1600	1700	2100
1400	1500	1500	1600	1700	1800	2200
1500	1600	1600	1700	1800	1900	2300

*Although Arizona is included in the Mountain Time Zone, The Phoenix Sub-Zone does not observe Daylight Saving Time. The Phoenix Sub-Zone includes all of AZ except the Navajo Nation in the NE corner of the state. When the rest of the US is observing DST, the Phoenix Sub-Zone is on the same time as Pacific Daylight Time. The Navajo Nation tracks with Mountain Daylight Time.

Sunrise and Sunset

The following Sunrise and Sunset Tables are available from the US Naval Observatory Web Site:

For One Year, http://aa.usno.navy.mil/data/docs/RS_OneYear.html

For One Day, http://aa.usno.navy.mil/data/docs/RS_OneDay.html