

KAIBAB NATIONAL FOREST

PILOT ORIENTATION GUIDE 2009

INTRODUCTION

Welcome to the Kaibab National Forest! The intent of this packet is to provide information needed by pilots who are new to the area. We hope the packet will make your stay a safe, productive and pleasant experience. Please contact the Forest Aviation Officer, the Williams Interagency Dispatch Center, or one of the individuals listed in the “Key Contacts” section if you have any questions while you are here.

NOTE: This is an interim orientation guide. We expect to release a new version of the guide on or about June 1, 2009.



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KEY CONTACTS

POSITION	NAME	PHONE NUMBERS	
		WORK	HOME
FOREST FIRE STAFF OFFICER	Dave Mertz	(928) 635-8340 <u>CELL</u> (928) 606-2632	(928) 635-1453
FOREST AVIATION OFFICER	Mike Ebersole	(928) 638-7878 <u>CELL</u> (928) 606-4374	(928) 638-2597
ASSISTANT FOREST AVIATION OFFICER/ DEPUTY FIRE STAFF OFFICER	Doug Ottosen	(928) 635-8350 <u>CELL</u> (928) 606-3076	(928) 556-8624
WILLIAMS INTERAGENCY DISPATCH CENTER MANAGER	Norma Orozco	(928) 635-2601	(928) 635-2258
PITTMAN VALLEY HELIBASE Helicopter Program Manager	James Pettit	(928) 635-2487 <u>CELL</u> (928) 606-4713 (928) 607-1676	
Assistant Helicopter Manager	Cole Orozco	(928) 635-2487 <u>CELL</u> (928) 699-1606	

AVIATION SAFETY EMPHASIS

GENERAL

Aviation safety is something we take very seriously. We will neither condone nor tolerate unsafe procedures or equipment. Safe air operations are a joint effort by everyone involved. We respect your authority as a pilot and the ultimate responsibility for passenger and flight safety. If you observe things you do not think are safe, PLEASE notify the Forest Aviation Officer or the Williams Interagency Dispatch Center immediately. Every effort will be made to promptly remedy the situation.

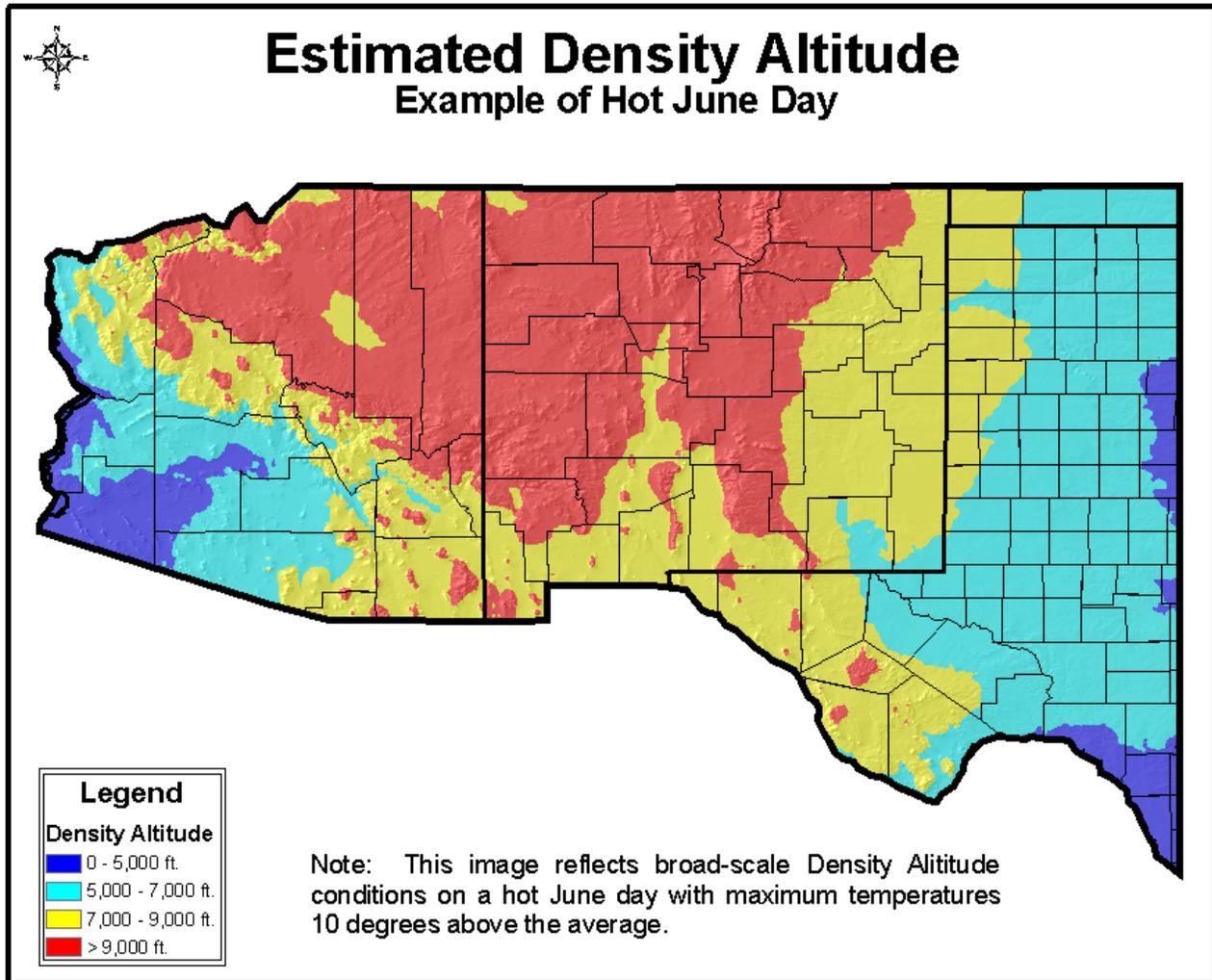
USER PRESSURE AND SAYING NO!

We are aware of the subtle pressures users may impose on a pilot. For example ... “land there, because the other pilot did yesterday” or “just one more pass around the fire before you head in for fuel”, etc. We have tried to make people on this Forest aware of that problem, but in the heat of battle, it is still going to happen. Someone is going to ask you to do something you may not feel comfortable doing. PLEASE QUESTION IT! Express your concern or just say “NO” to the request! We would prefer that everyone use this “rule of thumb”: IF IN DOUBT, DON'T DO IT! We guarantee the Kaibab National Forest will support your position 100 percent. If something like this occurs, we ask that you notify the Forest Aviation Officer of the situation so we can follow-up with the individuals involved.

HAZARDOUS FLYING CONDITIONS

We know that mountain flying in the heat of summertime is challenging at best. Graphical depictions of “Density Altitude Outlook” for the southwest area have been developed by Predictive Services and are posted on the Southwest Coordination Center website at http://gacc.nifc.gov/swcc/dispatch_logistics/aviation/aviation.htm (see the example below). Two graphics are available on the website: one is a daily Density Altitude (DA) forecast map and the other is a static example of DA conditions during a “hot June day”.

Air density is one of the most important factors affecting aircraft performance, since it affects the amount of lift generated by a propeller or rotor blade and also the amount of horsepower or torque developed by the engine. The southwest, including the Kaibab National Forest and Grand Canyon National Park, often experiences relatively high DA conditions during the summer months. There have been a number of aviation accidents where DA played a significant role.



Because of winds, turbulence, down drafts, and other environmental problems, there are times when we must shut down air operations until conditions improve. Pilots are usually the first ones to become aware of these types of conditions. PLEASE do not hesitate to suggest or recommend that operations be suspended until conditions improve. Let other aircraft and the Williams Interagency Dispatch Center know of conditions in your area. Your communication may keep someone from having an incident or accident.

MAINTENANCE/SERVICING

Please inform the Williams Interagency Dispatch Center of upcoming maintenance well in advance so replacement aircraft can be ordered, if necessary. All aircraft should be serviced after each flight and made ready for the next assignment; this includes fueling as well as any other service.

FLIGHT/DUTY TIME

Please track your flight and duty time. Helitack personnel or the helicopter manager will also assist with this. When things are busy, the Williams Interagency Dispatch Center cannot keep track of everyone's duty time or flight hours. It is your responsibility to inform the Williams Interagency Dispatch Center well in advance of when your duty or flight time limits will be reached.

INCIDENT/ACCIDENT REPORTS

Our Incident/accident reporting system (SAFECOM) is valuable in promoting aviation safety. The SAFECOM system is **not** intended for initiating punitive actions. Submitting a SAFECOM is also **not** a substitute for "on-the-spot" correction(s) to a safety concern. It is a tool used to identify, document, track and correct safety related issues. By sharing information about things that have happened here, we may help prevent them from happening again. Please report any accident or incident that has occurred on a FS-5700-14 SAFECOM form (<http://www.safecom.gov/>) while you are assigned to the Kaibab National Forest. This form is available through the Williams Interagency Dispatch Center, on-line or from the Forest Aviation Officer (FAO). If not filed on-line, the SAFECOM should be returned to either Dispatch or the FAO. These reports are kept confidential, unidentified, and distributed periodically through an interagency network.

MEDICAL FACILITIES

There is a fully staffed hospital in Flagstaff with ambulance service available. All aircraft MEDEVACS are coordinated through the Williams Interagency Dispatch Center. Medical personnel (EMT's, paramedics, etc.) will determine whether patients need to be transported to the Flagstaff Medical Center (FMC) by air or by ground. For information, an air ambulance service (Guardian) is based at FMC.

Hospital Coordinates:

Flagstaff Medical Center: 1200 N. Beaver Street Flagstaff AZ 86001 Telephone (928) 779-3366	N 35° 12.49' W 111° 38.56'	7,050' MSL
Kane County Hospital: 355 North Main Street Kanab UT 84741 Telephone (435) 644-4100	N 37° 00.67' W 112° 31.70'	4,868' MSL

FLIGHT HAZARDS

Forest aerial hazard maps are located at Green Base and in the Dispatch Center. Please make sure that you have obtained copies prior to flying for the Kaibab National Forest. Pilots flying for the Forest are also required to complete the Grand Canyon National Park Special Flight Rules Area on-line training course. The Forest shares boundaries with the Park and pilots must be familiar with this special use airspace. The following is an excerpt from the Southwest Area Mobilization Guide:

Aircraft Operations in the Grand Canyon Area. The Grand Canyon National Park Special Flight Rules Area (GCNP SFRA), 14 CFR Part 93 Subpart U, extends from the surface to 17,999 feet MSL and affects all aircraft operations. This includes tour, general aviation, airline, military and other government agency aircraft. The Federal Aviation Administration (FAA) has issued the U.S. Department of the Interior (DOI) a FAA Form 7711-1 "Certificate of Waiver or Authorization" which allows aircraft engaged in official government flight operations for DOI (or their interagency partners) to operate within the Special Flight Rules Area. DOI may re-issue this authorization to each pilot-in-command (PIC) upon the successful completion of the GCNP SFRA training and testing program at <http://www.iat.gov>. THIS AUTHORIZATION MUST BE RE-ISSUED ANNUALLY. DOI AMD Operational Procedures Memorandum 56 and an internal memo from the US Forest Service National Aviation Operations Officer require the use of this waiver for all DOI and USFS flight operations in the SFRA. Flight crews operating in the GCNP SFRA should have a thorough understanding of Federal Aviation Regulation 93 Subpart U and must successfully complete on-line training and testing prior to entering this special use airspace. The information in the new on-line training program continues to meet FAA training standards. The training and testing can generally be accomplished in about 45 minutes and is required for legal and safety purposes. This program meets the requirements of the waiver for training, testing, and record keeping. To access and run the new on-line GCNP SFRA training and testing module, you will need a current copy of the Grand Canyon VFR Aeronautical Chart, a Pentium II or equivalent computer with a minimum 56k internet connection, and a current web browser. Macromedia Flash Plug-in Player version 6 or higher is also required. FAA Form 7711-1 will be issued electronically to each PIC after the successful completion of the training and testing. These credentials must accompany pilots whenever they are operating aircraft in the SFRA. Each PIC is responsible for complying with the DOI-issued FAA Form 7711-1 and its "Special Provisions". FAA Form 7711-1 does not constitute a waiver to deviate from other applicable Federal Aviation Regulations, such as "see-and-avoid" responsibilities and other portions of Part 91, Part 135, etc. If you are scheduled to fly within the Grand Canyon National Park Special Flight Rules Area you must successfully complete the on-line module and be in possession of a current authorization before proceeding. Pilots are reminded to check the expiration date of their FAA 7711-1 "Special Provisions" to insure that the flight will be conducted within the effected dates of that authorization. Persons conducting flight operations must contact the Williams Interagency Dispatch Center in Williams, AZ at (928) 635-2601 in accordance with the special provisions of the DOI waiver.

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- LOCAL HELIBASES:

The following are the locations of our local helibases:

Pittman Valley (Green Base)	N35.16'.30"	W112.03'.30"	6,680' MSL
Jacob Lake (North Kaibab RD)	N36.42'.32"	W112.13'.29"	7,791' MSL
Grand Canyon NP (South Rim)	N36.02'.24"	W112.07'.48"	6,860' MSL
Grand Canyon NP (North Rim)	N36.11'.36"	W112.03'.24"	8,303' MSL

- MILITARY TRAINING ROUTES AND MILITARY OPERATION AREAS: There are several MTR's and MOA's that affect aviation operations on and around the Kaibab National Forest. Pilots should use a current copy of the Las Vegas Sectional Aeronautical Chart and the Grand Canyon VFR Aeronautical Chart to identify special use airspace. The Williams Interagency Dispatch Center can also assist in identifying these areas.
- WIRES AND POWER LINES: There are numerous wires and power transmission lines located throughout the Forest. Check the Flight Hazard Maps prior to each mission. All pilots should be briefed on flight hazards. You may assist by identifying unknown hazards and by personally briefing relief crews of known hazards.
- TOWERS: There are many different kinds of towers located on the Forest, which include lookouts, microwave, radio, cellphone and electronic sites. Check the Flight Hazard Maps and please notify us if we have missed some.
- MOUNTAIN FLYING: Flying conditions in mountainous areas can be hazardous. Clear, calm weather can change or deteriorate rapidly. All aircraft should avoid flying through squall lines when possible and be alert for sudden down drafts and wind shears.

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“TWELVE STANDARD AVIATION QUESTIONS THAT COULD SAVE YOUR LIFE”

1. IS THIS FLIGHT NECESSARY?
2. WHO IS IN CHARGE?
3. ARE ALL HAZARDS IDENTIFIED AND HAVE YOU MADE THEM KNOWN?
4. SHOULD YOU STOP THE OPERATIONS OR FLIGHT DUE TO:
 - Communications?
 - Weather?
 - Confusion?
 - Turbulence?
 - Personnel?
 - Conflicting priorities?
5. IS THERE A BETTER WAY TO DO IT?
6. ARE YOU DRIVEN BY AN OVERWHELMING SENSE OF URGENCY?
7. CAN YOU JUSTIFY YOUR ACTIONS?
8. ARE THERE OTHER AIRCRAFT IN THE AREA?
9. DO YOU HAVE AN ESCAPE ROUTE?
10. ARE ANY RULES BEING BROKEN?
11. ARE COMMUNICATIONS GETTING TENSE?
12. ARE YOU DEVIATING FROM THE ASSIGNED OPERATION OR FLIGHT?

THE TWELVE QUESTIONS LISTED ABOVE SHOULD BE COMMITTED TO MEMORY AND APPLIED TO ALL AVIATION OPERATIONS AT ALL TIMES. IF ANY QUESTIONS CAUSE YOU CONCERN IT BECOMES YOUR RESPONSIBILITY TO DISCONTINUE OPERATIONS UNTIL YOU ARE CONFIDENT THAT YOU CAN CONTINUE SAFELY. AVIATION SAFETY IS A PERSONAL RESPONSIBILITY. YOUR LIFE AND THE LIVES OF OTHERS DEPEND UPON YOUR DECISIONS!

“WHEN IN DOUBT.....DON'T”

ROLE OF THE DISPATCH CENTER

GENERAL

- The primary mission of the Williams Interagency Dispatch Center is to maintain prompt and accurate communications and coordination of all incidents on the Forest and on Grand Canyon National Park. This is accomplished by continually monitoring current and forecasted conditions on the Forest, Park, and with cooperators, allowing the implementation of necessary action.
- Aviation safety is of the utmost concern to the dispatch staff. The dispatch staff coordinates all aircraft use on the Kaibab National Forest and on Grand Canyon National Park. Also, the Williams Interagency Dispatch Center will often support adjoining forests, agencies and neighboring regions with aircraft. The ultimate goal of the Williams Interagency Dispatch Center is efficient utilization of aircraft with safety being the highest priority. All decisions regarding air tankers, lead planes, ASM's, and helicopters are coordinated with the Forest's Fire Staff and/or the Geographical Area Coordination Center. Dispatchers work closely with the Southwest Coordination Center (SWCC) in national resource aircraft ordering and dispatching.

FLIGHT FOLLOWING PROCEDURES

- For flights on the Forest and Park, the Williams Interagency Dispatch Center will be notified prior to each landing and take off, and after each landing. Position reports will be made every 15 minutes in flight unless Automated Flight Following (AFF) is used. **This is critical!**
- Automated Flight Following will adhere to the standards set forth within the National Mob Guide (Chapter 24.3.1) and/or the Southwest Area Mob Guide (Chapter 24.2.3).
- All aircraft flying Forest and Park missions are expected to file a flight schedule with the Williams Interagency Dispatch Center. This should cover aircraft, pilot, passengers, route, destination, and expected time of departure and arrival. If you are not able to contact the Williams Interagency Dispatch Center or someone else to report your position (such as a lookout), you should return to base.

GPS USE

The Williams Interagency Dispatch Center has the capability of converting latitude/longitude to a township/range/section, or vice-versa. Although this program is being phased out, it can also provide heading and nautical miles from VORs, Air tanker Bases and Helibases. It will also tell us if we are entering into a Military Training Route (MTR). If you have GPS capability in your aircraft, the Williams Interagency Dispatch

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Center will be able to give you the coordinates for the location as well as heading and distance from the closest VOR. All coordinates should be in the format of degrees, minutes, seconds, not degrees, minutes, tenths or hundredths of seconds. Pilots must ensure that all GPS receivers on board their aircraft are using the NAD 83 datum.

KAIBAB NATIONAL FOREST COMMUNICATION PROCEDURES

1. The Incident Commander (I.C.) assigned to a developing fire is responsible for frequency management on that incident. The Incident Commander will ensure frequency coordination with the Williams Interagency Dispatch Center and that the procedures outlined below are followed to the maximum extent possible.
2. Initial attack fire personnel will utilize one of the Forest's primary frequencies. As the incident grows and communications become more complex, it is the I.C.'s responsibility to change to a more open frequency. The Incident Commander shall notify the Williams Interagency Dispatch Center that the fire is changing to a tactical (TAC) channel. The TAC 1 channel is 168.050, TAC 2 channel is 168.200 and the TAC 3 channel is 168.600 and these will be utilized. The Williams Interagency Dispatch Center does not have the capability to monitor these frequencies; therefore, the I.C. must monitor the Forest Frequency as well.
3. The I.C. will coordinate air-to-ground frequencies with the Air Tactical Group Supervisor, ASM, or Lead Plane over the incident. The Kaibab National Forest uses 171.475 for air-to-ground and the Regional air-to-ground frequency of 170.000.
4. All air-to-air communications will be on VHF-AM frequency 135.600 (Primary) for Initial Attack (per Southwest Area Mobilization Guide, Section 71-2). If this frequency is already in use due to high fire activity, another VHF-AM frequency will be assigned by the Southwest Coordination Center in Albuquerque. If the operation requires a Temporary Flight Restriction (TFR per FAR Part 91.137), the Williams Interagency Dispatch Center will order a discrete VHF-AM frequency for the incident through SWCC (a TFR is not necessarily required when ordering a VHF-AM frequency). When a discrete frequency is assigned, the Air Tactical Group Supervisor will switch all aircraft on the incident to that frequency.
5. ALL communications on the Forest and Park must be in narrow-band mode. If narrow-band communication is not used, significant disturbance to the communication system will occur and safe operations can be affected.

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Kaibab National Forest Frequencies
(NARROW BAND)
Group-1

Channel	RX- Freq	TX-Freq	Channel Name
1	170.550	170.550	S. Zone Simplex
2	170.550	170.250	S. Zone Repeater
3	171.550	171.550	Coco. Fire Simplex
4	171.550	173.025	Coco. Fire Repeater
5	172.300	172.300	Coco. Admin. Simplex
6	172.300	171.475	Coco. Admin. Repeater
7	172.575	172.575	GCNP Fire Simplex
8	172.575	169.675	GCNP Fire Repeater
9	171.475	171.475	GCZ Air to Ground
10	171.575	171.575	FLZ Air to Ground
11	154.280	154.280	Arizona NIMS
12	168.050	168.050	Tac-1
13	168.200	168.200	Tac-2
14	168.600	168.600	Tac-3

User Selectable Tone Guards
Kaibab- Coconino- GCNP

User Tone	TX Tone Freq.	Kaibab User Tone Name	Coco. User Tone Name	GCNP User Tone Name
1	103.5	Simplex	Squaw Peak	
2	136.5	South Canyon	Hutch Mountain	
3	146.2	Saddle Mountain	Mount Elden	
4	156.7	Bill Williams	Schnebly Hill	
5	167.9		Moqui	
6	179.9	Tusayan		
7	127.3		Saddle Mountain	Hopi Point
8	123.0	Grandview		

Kaibab National Forest Frequencies
(NARROW BAND)
Group -2

Channel	RX-Freq.	TX-Freq.	Channel Name
1	168.750	168.750	N. Zone Simplex
2	168.750	169.900	N. Zone Repeater
3	171.550	171.550	Dixie Fire Simplex
4	171.550	172.350	Dixie Fire Repeater
5	168.425	168.425	Arizona Strip Simplex
6	168.425	169.325	Arizona Strip Repeater
7	172.575	172.575	GCNP Fire Simplex
8	172.575	169.675	GCNP Fire Repeater
9	171.475	171.475	GCZ Air to Ground
10	168.975	168.975	BLM Cedar City Simplex
11	154.280	154.280	Arizona NIMS
12	168.050	168.050	Tac-1
13	168.200	168.200	Tac-2
14	168.600	168.600	Tac-3
15	163.100	163.100	Bryce Canyon N.P.
16	166.325	166.325	Zion N.P.

User Selectable Tone Guards
Kaibab- Dixie- GCNP- Az. Strip

User Tone	TX Tone Freq.	Kaibab User Tone Name	Dixie User Tone Name	Az. Strip User Tone Name
1	103.5	Simplex / Jacob Lake	Blow Heard	
2	110.9	Dry Park	Big Mountain	
3	123.0	Big Springs / GCNP Kanab		Hudson Point
4	131.8	Big Ridge		
5	136.5	South Canyon		Seemiller
6	167.9	Kanab Hill		Mount. Logan
7	151.4	GCNP- VT Hill		
8	156.7			Moccasin
9	179.9		Utah Hill / Beaver Dam	

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Location	Type	RX Freq.	TX Freq.	CTSS Tone	Latitude	Longitude	TownShip	Range	1/4 Section
Jacob Lake					36 42.13	112 11.99	38 N	2 E	SE of SE
	Simplex	170.55	170.55	103.5					
	Repeater	170.55	170.25	103.5					
Dry Park					36 27.33	112 13.92	35 N	2 E	SW of SW
	Simplex	170.55	170.55	103.5					
	Repeater	170.55	170.25	110.9					
Big Springs					36 35.83	112 19.53	37 N	1 E	NE of NE
	Simplex	170.55	170.55	103.5					
	Repeater	170.55	170.25	123					
Big Ridge					36 43.22	112 11.18	38 N	2 E	NW of SE
	Simplex	170.55	170.55	103.5					
	Repeater	170.55	170.25	131.8					
South Canyon					36 20.59	112 2.92	34 N	3 E	NE of SW
	Simplex	170.55	170.55	103.5					
	Repeater	170.55	170.25	136.5					
Saddle Mt.					35 26.0	111 43.7	24 N	6 E	SE of NW
	Simplex	168.75	168.75	103.5					
	Repeater	168.75	169.9	146.2					
Bill Williams					35 12.08	112 12.3	21 N	2 E	SE of NW
	Simplex	168.75	168.75	103.5					
	Repeater	168.75	169.9	156.7					
	Air Net	168.65	168.65						
	Air Guard	168.625	168.625						
Tusayan					35 59.19	112 7.23	30 N	2 E	SE of NE
	Simplex	168.75	168.75	103.5					
	Repeater	168.75	169.9	179.9					
Kanab Hill									
	Simplex	170.55	170.55	103.5					
	Repeater	170.55	170.25	167.9					

RADIO FREQUENCIES

Coconino Frequencies

Coconino Forest	TX Frequency	RX Frequency	Tone
COCONINO CHANNEL 1	171.550	171.550	103.5
COCONINO CHANNEL 2	172.300	172.300	110.9
CHANNEL 1 REPEATER	173.025	171.550	127.3
CHANNEL 2 REPEATER	171.425	172.300	136.5
FLAGSTAFF F.D.		155.475	
TACTICAL CHAN. 1	168.050	168.050	91.5
TACTICAL CHAN. 2	168.200	168.200	00
TACTICAL CHAN. 3	168.600	168.600	00
COCONINO CREW	168.350	168.350	00
AIR/GROUND	171.575	171.575	00
MUTUAL AIDE	154.280	154.280	00

Coconino Repeaters

Mountain	Tone #	Tone	Repeater
SQUAW PEAK	1	103.5	CHANNEL 1 &2
SADDLE MOUNTAIN	3	127.3	CHANNEL 1 &2
HUTCH MOUNTAIN	4	136.5	CHANNEL 1 ONLY
MT ELDEN	5	146.2	CHANNEL 2 ONLY
SCHNEBLY	6	156.7	CHANNEL 2 ONLY
MOQUI	7	167.9	CHANNEL 2 ONLY

LOCAL AVIATION FUEL OUTLETS

FLAGSTAFF (Pulliam Airport) KFLG 7,011' MSL
 Unicom 122.950 100LL, Jet A, Fuel (Self-Service) 24 hours
 Wiseman Aviation – (928) 779-9585 or (877) 947-3326

KANAB (Kanab Municipal Airport) KKNB 4,868' MSL
 CTAF/Unicom 122.800 100LL, Jet A
 Kanab Airport – (435) 644-2299

GRAND CANYON (Grand Canyon National Park Airport) KGCN 6,609' MSL
 Unicom 122.950 100LL, Jet A
 Grand Canyon Airlines – (928) 638-7117 or 638-2463

PAGE (Page Municipal Airport) KPGA 4,310' MSL
 CTAF/Unicom 122.800 100LL, Jet A
 American Aviation – (928) 608-1060
 Classic Aviation – (928) 645-5356
 *After hours (928) 660-1060 or (928) 645-5356

PRESCOTT (Ernest A. Love Field) KPRC 5,045' MSL
 Unicom 122.950 100LL, Jet A
 Telephone (928) 777-1150 or 771-1150
 *After hours (928) 445-3131

SEDONA (Sedona Airport) KSEZ 4827' MSL
 CTAF/Unicom 123.000 100LL, Jet A
 Telephone (928) 282-4487

WILLIAMS (H.A. Clark Memorial Field) KCMR 6680' MSL
 CTAF/Unicom 122.800 100LL, Jet A
 Aviation Services of Northern Arizona – (928) 635-3057 or (928) 853-8982 or the Airport Manager at (928) 635-1280