

**Fort Hood Semi-Annual
Weather Briefing**

SUMMER TRANSITION SEASON



**3d Weather Squadron
(3 WS)**

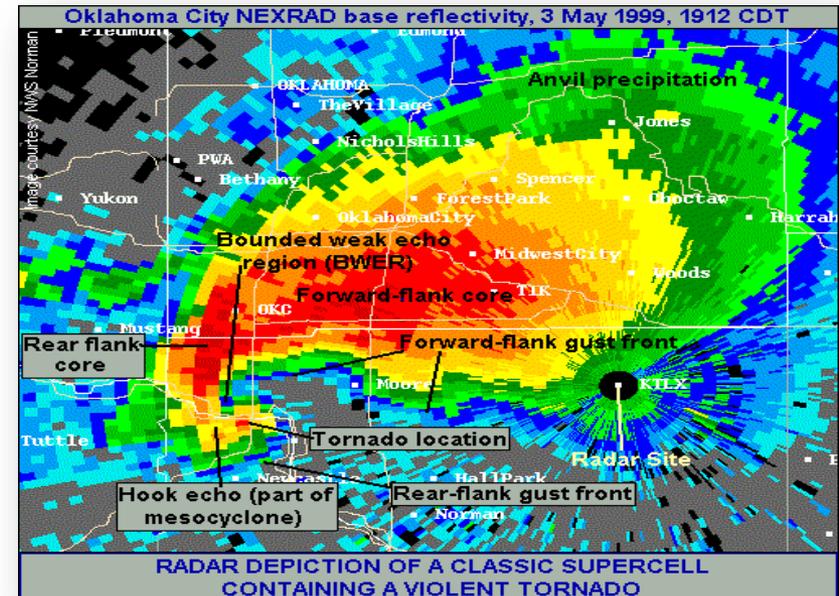
Updated 24 Sep 12



OVERVIEW



- ➔ Local Area Influences
- ➔ Summer Climatology
- ➔ Hazards
- ➔ Training Areas
- ➔ Watches/Warnings/Advisories
- ➔ Weather Operations
- ➔ POCs





Summer Synoptic Pattern



- ➡ Marked by the northward movement of the Bermuda High
- ➡ Few true frontal passages with the Polar Front Jet remaining well north, keeping region hot & humid
 - Few that do pass are weak and mainly affect the panhandle region
- ➡ Most weather associated with Gulf moisture, dryline--“Marfa Front”





Local Area Influences



- ☞ Rolling hills with peaks up to 1,500'
- ☞ Large lake areas and abundant foliage
 - Act as moisture sources for thunderstorms and fog
- ☞ Flat basin surrounded by hills
- ☞ “I-35 Rule” - Storms dissipate over us; regenerate or intensify east of I-35
- ☞ Isolated weather conditions throughout reservation
 - What looks good at RGAAF and HAAF can be different on the north and east-side of the reservation
- ☞ Low river crossings, hard ground, low water retention causes flash flood situations

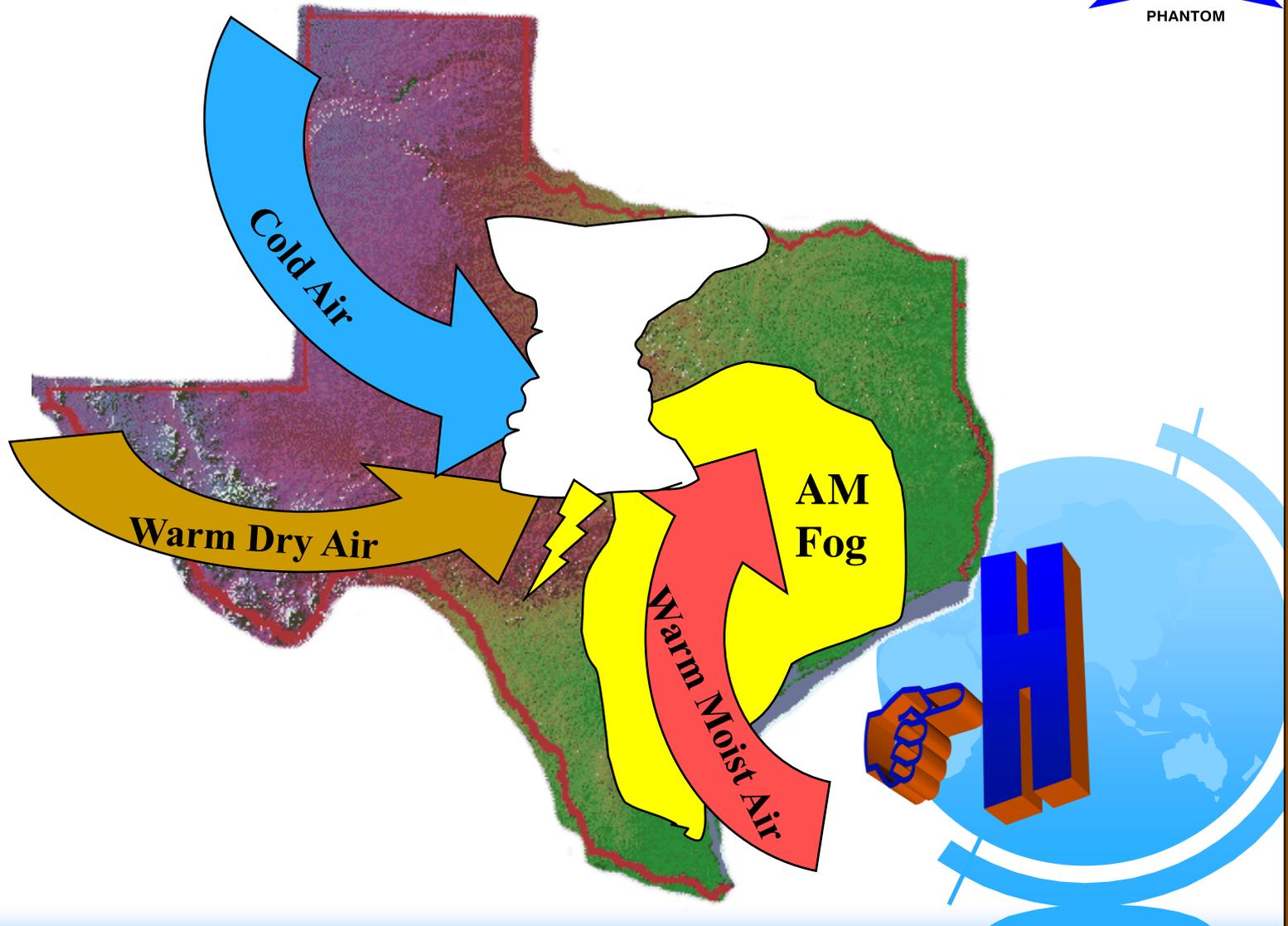




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Weather Influences





Summer Weather



- ☞ Dominated by high temperatures and isolated afternoon and evening thunderstorms (primarily early summer)
 - Average high temperatures are in the mid 90s and lows in the low 70s
 - Extremes range from 55F to 111F
- ☞ Early Summer is the rainy season
 - Mostly from thunderstorms

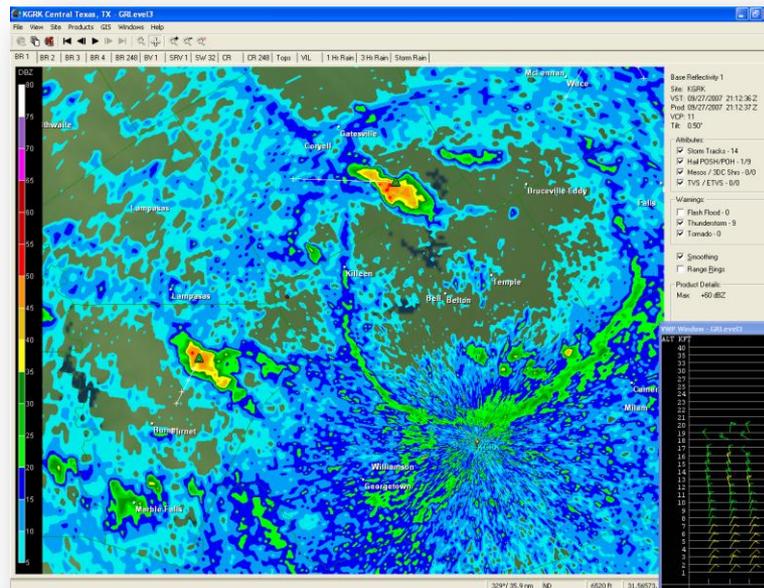




Summer Weather (Cont)



☞ Air mass thunderstorms form during the heat of the day and generally move slowly with weak steering flow aloft or can remain stationary late afternoon and early evening





Climatological Data



May Jun Jul Aug Sep

Temperature

Mean Max (F)	83	90	95	94	88
Mean Min (F)	64	71	74	74	68
Extm Max (F)	102	108*	109	108	111

Precipitation

Mean Month (inch)	4.4	3.6	1.8	2.7	2.5
Mean # TSTM Days	8	7	5	5	4





CEILING CLIMO

(< 1,000 Ft)



% Ceiling < 1000 ft

Name: ROBERT GRAY AAF, TX United States Block Station: 722576

ICAO: KGRK Lat: 31.067 Lon: -97.833 Time Offset: -6.00

Data Derived from 14WS Surface Observation Database / POR: 1973 - 2005

14WS (AFWA)

151 Patton Ave, Rm 120
Asheville, NC 28801-5002

23Z (17L)	14	12	9	4	2	1	0	1	3	5	10	14
22Z (16L)	15	12	7	5	2	1	0	1	3	5	9	14
21Z (15L)	15	12	8	5	2	1	0	0	3	6	10	14
20Z (14L)	16	13	10	6	1	1	0	1	3	7	10	15
19Z (13L)	19	15	11	7	2	2	0	1	3	8	12	15
18Z (12L)	20	17	13	8	3	1	1	1	5	9	11	17
17Z (11L)	24	20	17	11	5	2	1	2	6	11	14	20
16Z (10L)	25	25	20	14	7	4	1	3	7	14	19	23
15Z (09L)	27	27	22	19	12	5	2	4	11	20	23	25
14Z (08L)	27	27	25	23	16	10	4	6	15	24	26	25
13Z (07L)	27	29	24	25	21	13	7	7	17	25	25	25
12Z (06L)	26	28	25	22	21	12	7	6	16	25	23	23
11Z (05L)	25	24	22	18	20	13	6	5	12	19	21	22
10Z (04L)	27	23	21	16	17	11	5	5	12	18	21	22
09Z (03L)	25	23	20	15	12	7	4	4	10	17	19	21
08Z (02L)	24	20	18	14	10	6	3	3	10	15	17	21
07Z (01L)	22	19	18	11	9	4	2	2	9	12	17	20
06Z (00L)	21	17	17	9	7	3	2	2	6	10	14	19
05Z (23L)	20	16	14	9	5	3	1	2	5	9	14	20
04Z (22L)	18	16	12	8	4	2	1	1	4	8	13	17
03Z (21L)	16	14	11	6	3	2	1	1	4	7	13	16
02Z (20L)	14	16	11	6	3	2	0	1	3	6	12	15
01Z (19L)	14	14	10	5	3	1	0	1	3	5	11	14
00Z (18L)	14	13	10	5	2	1	0	1	3	5	10	13

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec





VISIBILITY CLIMO

(< 3 SM)



% Visibility < 3 SM

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14WS (AFWA)

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Asheville, NC 28801-5002

23Z (17L)	10	8	4	1	2	1	0	1	3	3	5	9
22Z (16L)	9	8	4	2	2	1	0	1	2	3	4	8
21Z (15L)	9	7	4	3	2	1	0	1	2	3	5	8
20Z (14L)	10	6	5	3	1	1	0	1	3	2	4	9
19Z (13L)	11	7	5	4	1	1	1	1	2	3	5	9
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00Z (18L)	10	8	6	3	1	1	0	0	2	3	5	7
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Summer Hazards





Summer Hazards



☞ Degraded Flying Operations

- Thunderstorms
 - ◆ Downbursts Gusts
 - ◆ Lightning
 - ◆ Hail

☞ High Temperatures

- Coupled with high humidity can cause heat injuries and rapid fatigue
- Ambient temperatures appear to feel warmer than actual temperature (heat index), watch outdoor activity closely





Summer Hazards



- ☞ Thunderstorms
 - Strong gusty wind
 - Turbulence
 - Low ceilings
 - Reduced visibilities
 - Hail
 - Severe weather possible

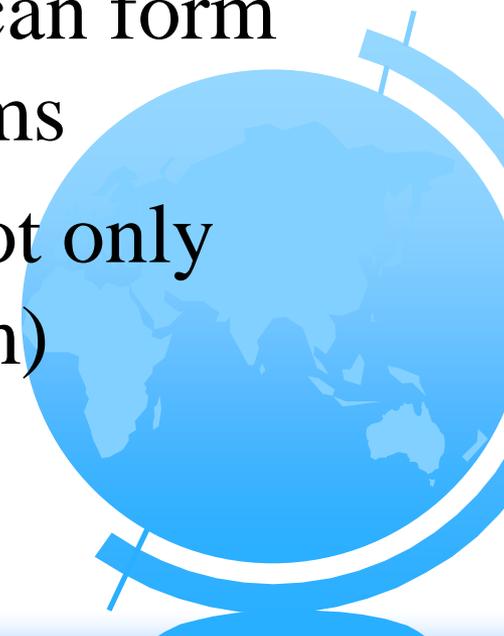




THUNDERSTORMS



- ➡ Expect severe turbulence, icing, and hail
- ➡ Greatest turbulence between updrafts and downdrafts
- ➡ Gust fronts (pseudo cold front) can form ahead of advancing thunderstorms
- ➡ Expect hail beneath the anvil (not only within or under the thunderstorm)





SEVERE WEATHER

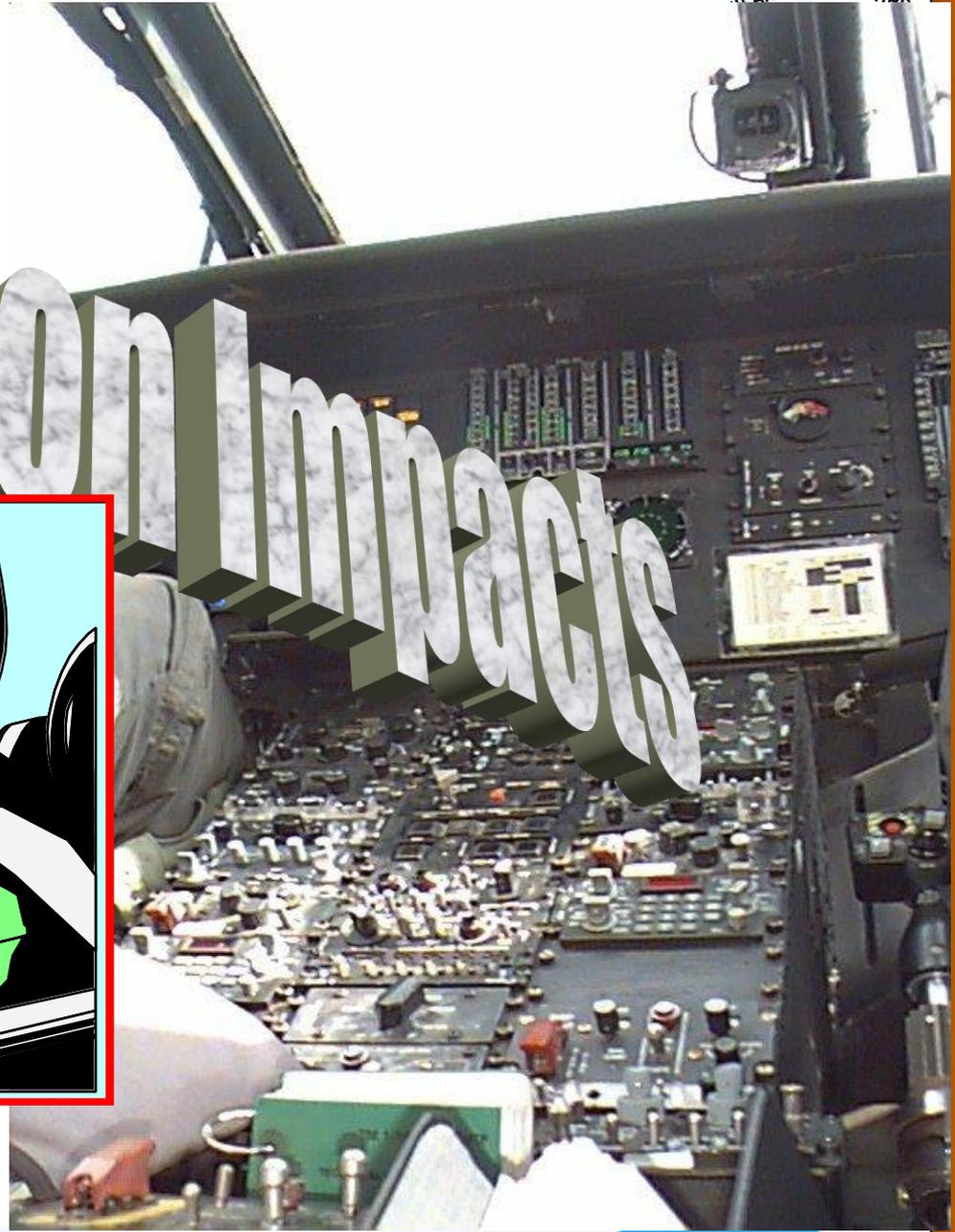


- ☞ Peak season
 - **March through June**
- ☞ Most frequent: afternoon/evening hours
- ☞ Linear formation along or ahead of fronts—dry line thunderstorms
- ☞ **RAPID FORMATION!**
 - **Outflow boundaries enhance further development (usually to the southwest of the line)**





Aviation Impacts





Lightning



LIGHTNING AND ELECTROSTATIC DISCHARGE

- ➡ Leading cause of weather related aircraft accidents
- ➡ Can occur in clear air as well as within and around a thunderstorm



Turbulence





TURBULENCE



- ☞ Turbulence is one of the most unexpected aviation hazards to fly through and one of the most difficult to forecast
- ☞ Caused by *abrupt, small-scale variations in wind speed and direction*
- ☞ **Pilot Reports (PIREPS) are crucial!**
 - May trigger advisories to help warn others
 - Always include location, time, intensity, flight level, and aircraft type

Gray METRO: UHF 306.5





TURBULENCE

(Continued)



☞ May occur any time without warning

- Directly proportional to speed:

Faster aircraft=more turbulence experienced

- Inversely proportional to weight:

Heavier aircraft=less turbulence experienced

- Directly proportional to wing area

Greater distance between leading and trailing edge of wing=more turbulence





TURBULENCE

(Continued)



- ☞ Intensities based upon Airspeed & Climb Rate
 - Light: Slight, erratic changes in altitude and or attitude (pitch, roll, yaw)
 - Moderate: Greater intensity than light, but aircraft remains in positive control
 - Severe: Large abrupt changes in altitude/attitude, large variations in airspeed; control becomes very difficult
 - Extreme: Aircraft violently tossed around with control virtually impossible; may cause structural damage





TURBULENCE

(Continued)



- ☞ Also caused by strong wind over rough terrain (*Fort Hood area not considered rough terrain*)
 - Rougher terrain = More turbulence
 - Higher wind speed = More Turbulence
- ☞ Frontal Transition Zone Turbulence
- ☞ Jet Stream (CAT)





TURBULENCE

(Continued)



- ☞ **Wake Turbulence:**
Caused by ‘Wingtip Vortices’
- ☞ **Virtually all aircraft produce wingtip vortices while in flight, even rotary wing aircraft; this is especially apparent with heavier aircraft**





LOW-LEVEL WIND SHEAR (LLWS)



- ➡ Rapid change in wind direction or speed below 2,000 feet AGL
- ➡ May occur with or without Turbulence
- ➡ Causes sudden changes in aircraft performance and attitude
- ➡ Common occurrence in Central Texas associated with nocturnal low-level jet
- ➡ Can occur with fronts and thunderstorm gust fronts (microburst)

Gray METRO: UHF 306.5



Weather Alerts



WEATHER WATCHES



- ☞ Issued for ***potential*** of weather conditions that can effect operations and safety at *Fort Hood and/or the Western Training Area*--Command decision on whether or not operations are altered
- ☞ Valid Times per text
- ☞ Valid for area described in text
 - Fort Hood Reservation
 - Western Training Area (Entire area or specific sector(s)--northeast, southeast, southwest or northwest)





WEATHER WARNINGS



- ☞ Take actions to protect property and life
- ☞ Valid Times per text [Observed Warnings valid Until Further Notice (UFN)]
- ☞ Valid for area described in text
 - Fort Hood Reservation (Specific areas of the reservation to include or not include RGAAF and/or HAAF)
 - Western Training Area (Entire area or specific sector(s)--northeast, southeast, southwest or northwest)





WEATHER ADVISORIES



- Advisories provide specific notice to an operational agency of weather phenomena *impacting operations*
- All Fort Hood weather advisories are observed advisories, meaning when the condition is observed by Doppler weather radar, weather sensors, or PIREPs, the advisory will be issued
- Valid for the area described in the text
- It will be valid “Until Further Notice” and it will be cancelled when the condition is no longer occurring





Fort Hood Reservation

Watch / Warning / Advisory



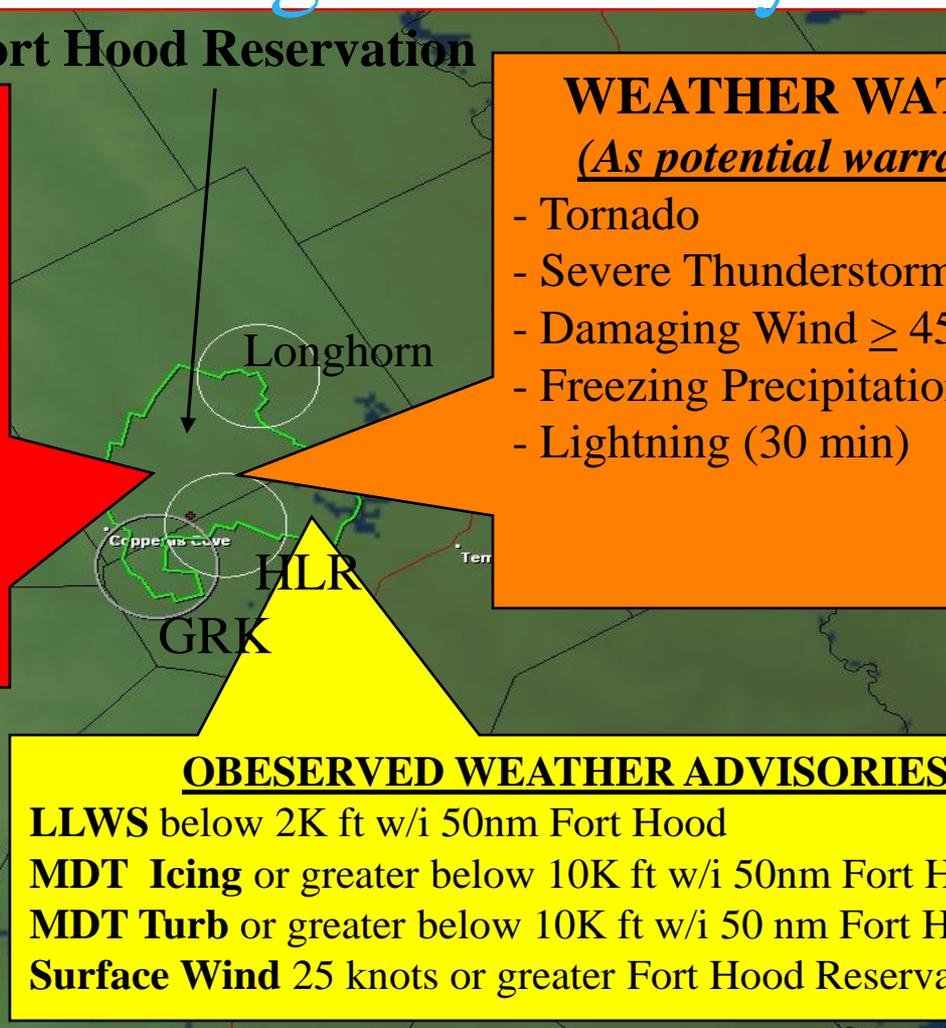
WEATHER WARNINGS:

- Tornado (15 min)
- Severe thunderstorms (1 hr)
- Damaging Wind \geq 45 kts (1 hr)
- Moderate Thunderstorms (1 hr)
- High Wind 35-44 kts (1 hr)
- Freezing Precipitation (1 hr)
- Heavy Rain (1 hr)
- Heavy Snow (1 hr)
- Lightning (Observed)

WEATHER WATCH *(As potential warrants)*

- Tornado
- Severe Thunderstorm
- Damaging Wind \geq 45 kts
- Freezing Precipitation
- Lightning (30 min)

Fort Hood Reservation



OBESERVED WEATHER ADVISORIES:

- LLWS** below 2K ft w/i 50nm Fort Hood
- MDT Icing** or greater below 10K ft w/i 50nm Fort Hood
- MDT Turb** or greater below 10K ft w/i 50 nm Fort Hood
- Surface Wind** 25 knots or greater Fort Hood Reservation



Fort Hood Reservation



☞ Severe Thunderstorm

- Damaging wind ≥ 45 knots and/or
- Damaging hail $\geq \frac{1}{2}$ inch in diameter

☞ Moderate Thunderstorm

- High wind ≥ 35 knots to < 45 knots and/or
- Large hail $\geq \frac{1}{4}$ inch to $< \frac{1}{2}$ inch

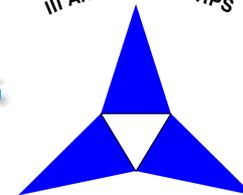


☞ **IMPORTANT: Refer to FH Reg 95-1 for specific severe weather plans/actions**



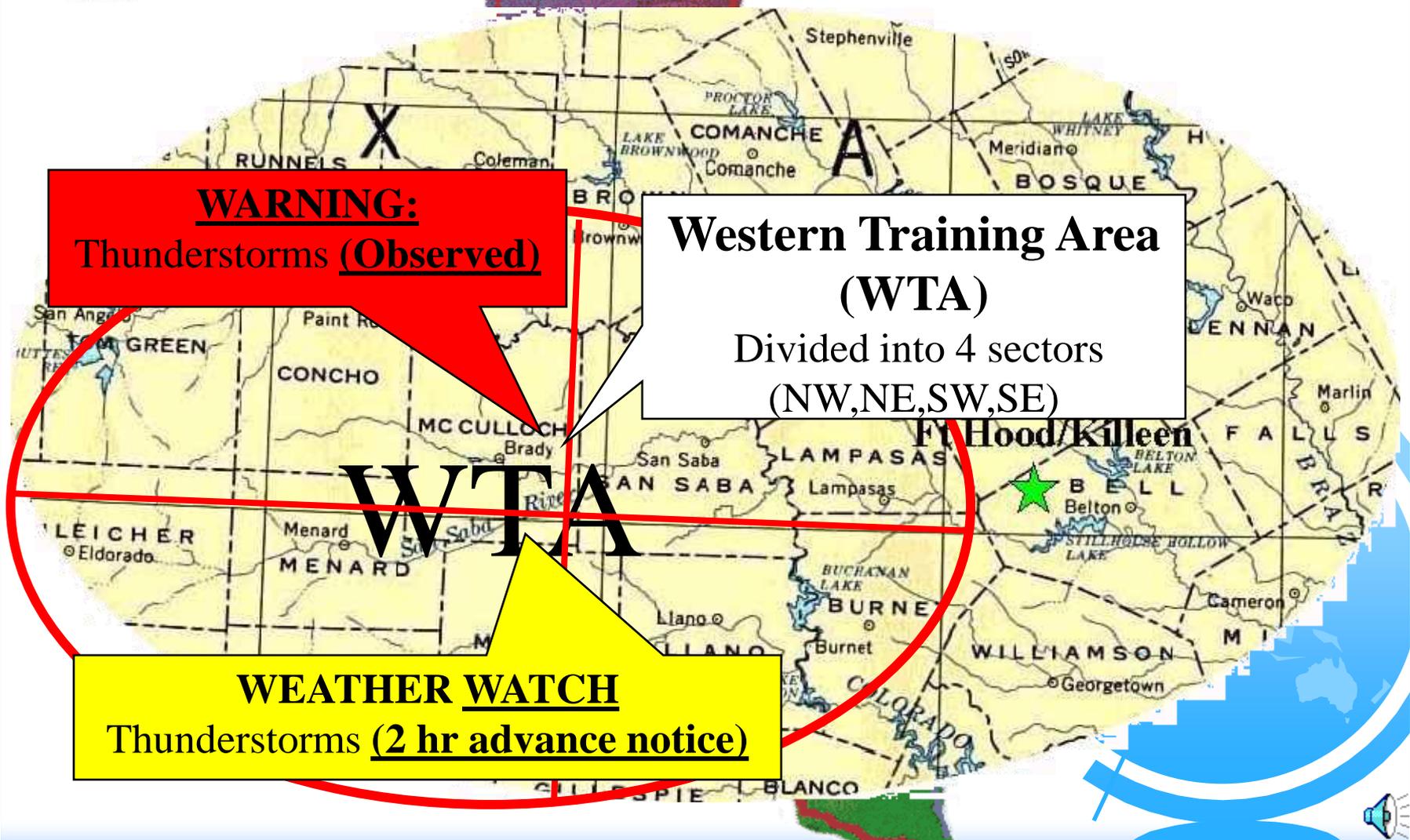
WESTERN TRAINING AREA

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PHANTOM

Watch / Warning



WARNING:
Thunderstorms (Observed)

**Western Training Area
(WTA)**
Divided into 4 sectors
(NW, NE, SW, SE)

WEATHER WATCH
Thunderstorms (2 hr advance notice)

WTA

Ft. Hood/Killeen





PILOT REPORTS (PIREPS)

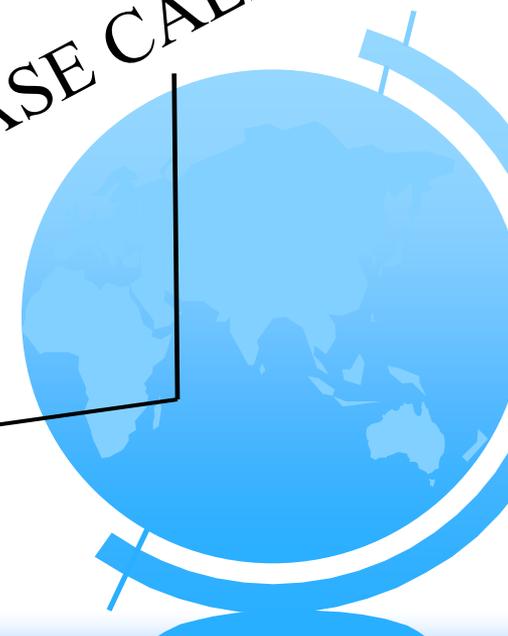


☞ Provide forecasters additional observations around the reservation and Western training areas

- Thunderstorms
- Turbulence
- Icing
- Low-Level Wind Shear (LLWS)
- Cloud conditions
- Wind, temperature, etc..
- Visibility, weather (i.e., fog, rain, etc.)

☞ PMSV frequencies: **UHF 306.5**

PLEASE CALL US!!!





Weather Operations



RGAAF Weather Station Operations



- ☞ RGAAF Weather Station located on West Fort Hood, Airfield Ops Bldg 90029:
 - 24/7 Operations
 - 2 Forecasters Mon-Fri 0600-1400L
 - 1 Forecaster Nights, Weekends, & Holidays
 - Manual Weather Observations
 - Flight Weather Briefings
- ☞ HAAF: Automated Weather Observations Only

Gray METRO: UHF 306.5





FLIGHT WEATHER BRIEFINGS



- ➡ Call 288-9620 or 288-9400
- ➡ E-mail: usarmy.hood.3-asog.mbx.3ws-woc@mail.mil
- ➡ Please arrange DD175-1 weather briefings as far in advance as possible
- ➡ **IAW AR 95-1, ONLY PILOTS CAN RECEIVE FLIGHT WEATHER BRIEFINGS**





FLIGHT WEATHER BRIEFINGS (Continued)



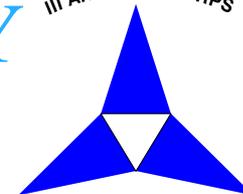
- ☞ DD175-1 Weather Briefs can be faxed or E-mailed
- ☞ **IMPORTANT:** Aircrews must call 288-9620/9400 after receiving the brief for briefer's initials, brief & void times--otherwise briefing is not official!
- ☞ For weather information visit our web site:
www.hood.army.mil/3ws
 - Current local airfield weather conditions
 - Current weather watches, warnings, advisories
 - Other weather information products



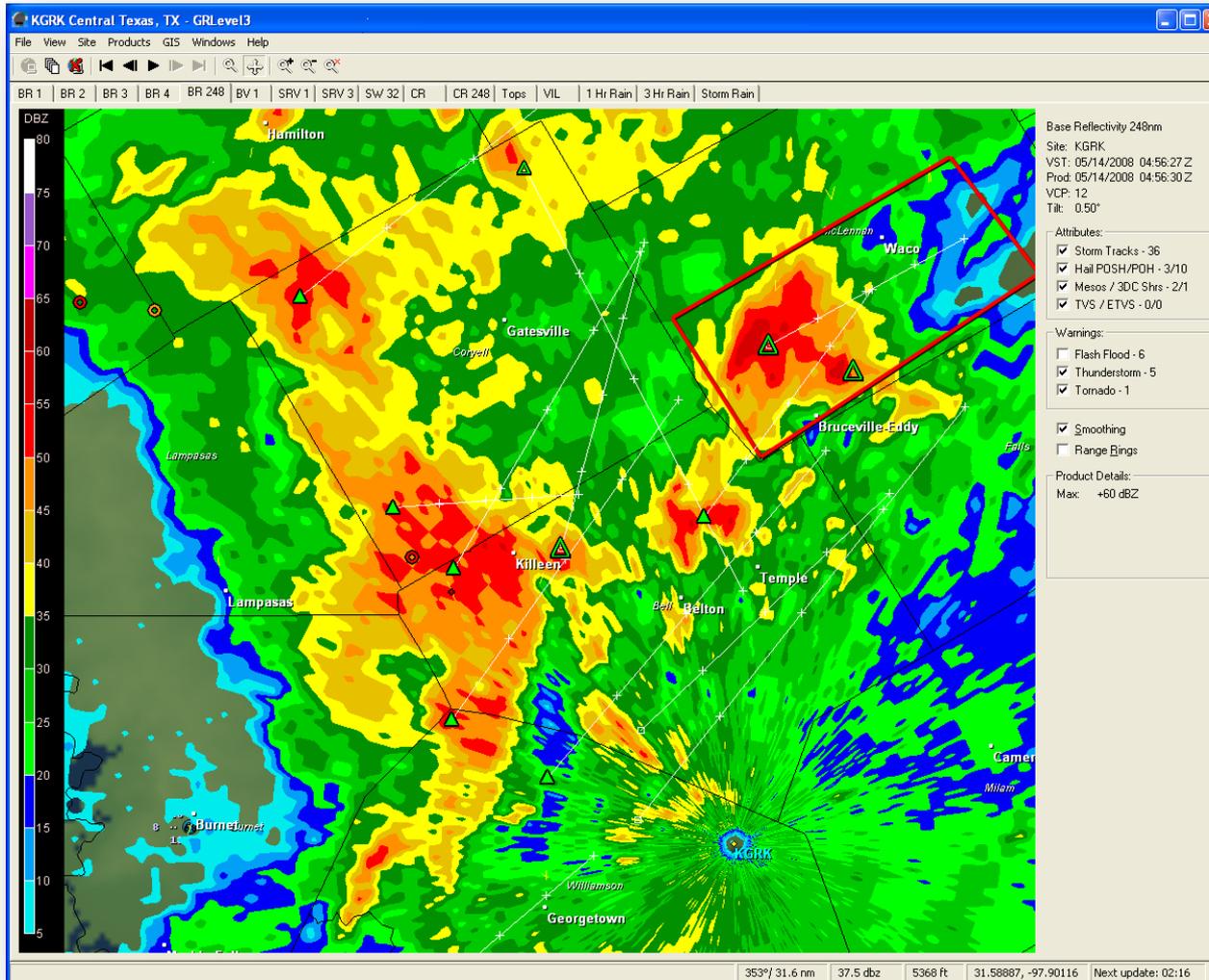


DOPPLER RADAR TECHNOLOGY

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DOPPLER RADAR TECHNOLOGY



- ☞ Tracks storm movement
- ☞ Provides vertical wind profiles (LLWS)
- ☞ Determine storm relative motion
- ☞ Highlights “potential” severe weather
 - Hail
 - Storm rotation--Tornadoes
- ☞ Cross-sections





3D Weather Squadron Homepage

www.hood.army.mil/3ws





Fort Hood Home Page



INSTALLATION STATUS: Welcome to Fort Hood's updated web presence - designed to enhance

HOOD A-Z HOOD FMWR IMCOM FORSCOM CENTCOM ARMY HOME DEFENSE LINK WEATHER FA ARMY A-Z AKO

HOOD.ARM.Y.MIL
WELCOME TO FORT HOOD, TEXAS

...The Great Place
Tuesday, September 23, 2008 2:31:04 PM

search hood.arm.y.mil Search FORT H

Fort Hood Weather Center - Windows Internet Explorer provided by US Army - Fort Hood NIPRNet

http://www.hood.arm.y.mil/weather/weather.htm

File Edit View Favorites Tools Help

Fort Hood Weather Center

and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community. Get the latest Fort Hood weather from any Internet portal by clicking on:

Further, complaints must be promptly filed within IG, command, or other grievance channels. IG's may dismiss a complaint if there is no FWA, recognizable wrong or violation of law, regulation, or policy. Also, complaints should be received in a timely manner.

<http://www.srh.noaa.gov/forecast/MapClick.php?CityName=Killeen&state=TX&site=FWD>

3d Weather Squadron

The squadron is the largest base- or post-level weather unit in the Air Force. The support provided by the squadron is as diverse as its history and that of the Army customers it supports. For example, the squadron maintains a 24-hour observing and forecasting section at Robert Gray Army Airfield with automated observing at Hood Army Airfield.

The latest weather information for professional aviators - or anyone with AKO access - is online at: <http://www.hood.arm.y.mil/3ws>.

NOAA Storm Watch

You'll find links to the latest weather forecasts around the USA. Track storms through NOAA weather satellites, get the latest weather maps and learn how to protect yourself and your community from severe weather. Hurricane, drought and tornado information can be found at the listed NOAA Web sites. Check it out online at: <http://www.noaa.gov/stormwatch/>.

National Hurricane Center

ARMY RETENTION
The next step in your Army Career

Civilian Spotlight
Former Dallas Cowboys linebacker Eugene "The Hitting Machine" Lockhart visited wounded warriors

Soldier dead
By Heather Graham, Ser
Specialist Aar Mulberry, Ind., a found dead fol Thursday by Fort his Pershing Park
Allmandinger's not home when t

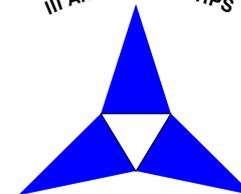
Click here, then here





3D Weather Squadron Homepage

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Misc Briefings

Current MWP (Flimsy)

Current WWAs

Current Obs

3rd Weather Squadron - Windows Internet Explorer provided by US Army - Fort Hood NIPRNet
 http://www.hood.army.mil/3ws/

3rd Weather Squadron

3d Weather Squadron

Fort Hood, Texas

U.S. AIR FORCE **"2010 AIR FORCE OUTSTANDING BATTLEFIELD WEATHER SQUADRON"** U.S. ARMY

HOME WEDNESDAY, JUNE 29

FORT HOOD WEATHER	IMAGES BELOW DO NOT DEPICT ACTUAL CONDITIONS CLICK ON THUMBNAILS FOR CURRENT INFORMATION		BRIEFINGS
<p>*FORT HOOD WEATHER WATCHES, WARNINGS, AND ADVISORIES (WWA)</p> <p>Click above for active Weather Watches, Warnings, and Advisories for Fort Hood</p> <p>*KGRK OBSERVATION & TAF</p> <p>*KHLR OBSERVATION</p> <p>* Denotes .mil access required</p>	MISSION EXECUTION FORECAST/5-DAY FORECAST		<p>SEMI-ANNUAL AVIATION WEATHER BRIEF (SUMMER)</p> <p>SEMI-ANNUAL AVIATION WEATHER BRIEF (WINTER)</p>
	Mission Execution Forecast	5-Day Forecast	<p>AIR TRAFFIC CONTROL WEATHER TRAINING</p>
AVIATION WEATHER	SATELLITE/RADAR/LIGHTNING/HAZARDS		<p>MANUAL WEATHER OBSERVING - JET</p>
PILOT REPORTS (PIREPS)	Satellite Imagery	Fort Hood Doppler Radar	<p>DRY-LINE FORECASTING</p> <p>3 WS MTRF/RIRF DRYLINE EXAMPLE</p>
AIRMETS/SIGMETS			<p>TURBULENCE--AIRCRAFT CATEGORIES</p>
SPACE WEATHER IMPACTS			<p>RADAR IMAGES TORNADO 25APR11</p>
<p>CLICK BELOW FOR FLIGHT WEATHER BRIEFINGS OR OTHER REQUESTS FOR WEATHER SUPPORT:</p> <p>WEATHER STATION E-MAIL</p> <p>RGAAF PMSV (Gray Metro):</p>			<p>PERFORMANCE METRICS: HOW WELL ARE WE FORECASTING?</p>
			<p>DoD WEATHER</p> <p>*JOINT ARMY-AF WEATHER INFORMATION NETWORK (JAAWIN)</p>

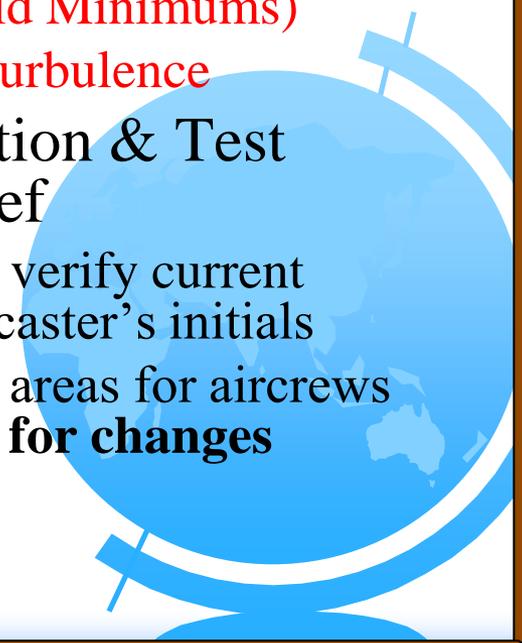




3 WS Mission Weather Product – 3 WS Flimsy



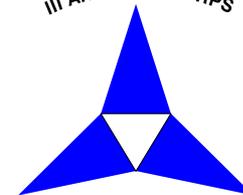
- ☞ Located on our web page: www.hood.army.mil/3ws
- ☞ Updated 3 times daily (0000Z, 0800Z, 1600Z)
- ☞ Amended:
 - Ceiling 3000 ft
 - Ceiling/Visibility 1000 ft / 3 SM (IFR – VFR)
 - Ceiling/Visibility 500 ft / ½ SM (HAAF Airfield Minimums)
 - Thunderstorms, Moderate or Greater Icing & Turbulence
- ☞ Aircrews flying within Fort Hood Reservation & Test Flight Areas III/V must call for official brief
 - Call the weather station at 288-9620 or 9400 to verify current Flimsy #, any updates, brief/void time and forecaster's initials
 - Units' ops may post copy of flimsy in common areas for aircrews (**IMPORTANT: Check website periodically for changes especially during inclement weather**)



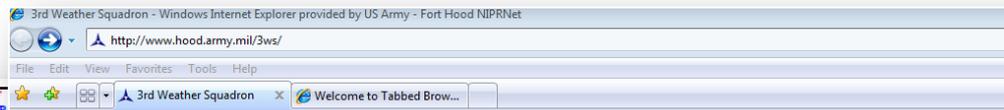


MWP (3 WS Flimsy)

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3d Weather Squadron

Fort Hood, Texas



"2010 AIR FORCE OUTSTANDING BATTLEFIELD WEATHER SQUADRON"



WEDNESDAY, JUNE 29

CALL 3 WS AT DSN 738-9630/9400, COM 288-9630/9400 FOR AN OFFICIAL FLIGHT WEATHER BRIEF
 CLICK HERE FOR LATEST WEATHER WATCHES, WARNINGS, AND ADVISORIES (OR GO TO 3 WS WEBP)

FORT HOOD MISSION PLANNING-EXECUTION FORECAST		#19	C	REVISION #	
FORECASTER	SKA GREENE	VALID TIME	291600Z-300400Z	REVISION TIME	
WEBSITE	www.hood.army.mil/3ws				
SOLAR/LUNAR DATA (ALL TIMES LOCAL)					
BMNT	SR	SS	EVENT	MR	MS
30/0529	30/0631	29/2039	29/2141	30/0547	29/2217
			ILLUM	MOON ANGLE ≥30 DEG	
			5%	DAYLIGHT	
FLIGHT LEVEL WIND AND TEMP (°C) - LOCAL FLYING AREA			SPACE WEATHER EFFECTS		
500' (AGL)	1000' (AGL)	2000' (AGL)	3000' (MSL)	5000' (MSL)	6000' (MSL)
15015	15015	15015	15015	15015	10020
			GPS	C	Unlikely Degradation
			UHF	C	Unlikely Degradation
			HF	C	Unlikely Degradation
MINIMUM FREEZING LEVEL (MSL)			15000 Ft		
FLIGHT HAZARDS WITHIN ~150NM OF FORT HOOD (LOCAL FLYING AREA IAW FHR95-1)					
MAIL SEVERE TURBULENCE & ICING, HEAVY PRECIP, LIGHTNING & WIND SHEAR EXPECTED IN & NEAR THUNDERST					
HAZARD		LEVEL (MSL)	INTENSITY-COVERAGE	LOCATION	
ICING				NONE	
TURB CAT II		020-100	LGT OCNL MDT	N OF TPL AND E OF ABI	
TURB CAT I		020-100	MDT	N OF TPL AND E OF ABI	
CAT I AIRCRAFT (UH-60, AH-64, CH-47, BE-20, UC-35, C-208) // CAT I AIRCRAFT (UH-1, OH-58, HUNTER UAS, SHADOW UAS) NOTE: AN AIRCRAFT'S WEIGHT, AIRSPEED, AND/OR ALTITUDE MAY CHANGE ITS TURBULENCE CATEGORY FROM ITS DEFAULT V					
RGAAF AND HAAF TAKEOFF AND LANDING DATA					
VALID TIME	MIN ALSTG	MAX TMP		RGAAF (KGRK)	
		C	F	MAX PA	MAX PA
1600Z - 1900Z	30.04 INS	36	97	905 Ft	4184 Ft
1900Z - 2200Z	29.96 INS	38	100	979 Ft	4562 Ft
2200Z - 0100Z	29.94 INS	38	100	997 Ft	4585 Ft
0100Z - 0400Z	29.94 INS	36	97	997 Ft	4297 Ft
0400Z - 0700Z	29.96 INS	30	86	979 Ft	3434 Ft
0700Z - 1000Z	29.95 INS	27	81	983 Ft	3637 Ft
1000Z - 1300Z	29.97 INS	24	75	970 Ft	2611 Ft
1300Z - 1600Z	30.00 INS	30	86	942 Ft	3389 Ft
FT HOOD RESERVATION FORECAST (INCLUDES RGAAF, HAAF, AND TEST AREAS III AND V)					
TIME (Z)	WIND (KTS)	VISIBILITY/WEATHER		CLOUDS/CEILINGS (AGL)	
291600-292100	18006	7		CLR	
292100-300100	15012	7		CLR	
300100-300400	15006	7		CLR	
NOTE: ABOVE CONDITIONS ARE THE MINIMUM EXPECTED					
FORECAST FOR FORT HOOD RESERVATION WILL BE AMENDED FOR: CEILINGS 3000' +000' AND 500' THUNDERSTORMS VISIBILITY 3 MILES AND 1/2 MILE MODERATE OR GREATER ICING/TURBULENCE					
FORT HOOD RESERVATION 24-HR PLAIN LANGUAGE FORECAST		CLEAR SKIES THROUGHOUT THE DAY WITH SOUTHEASTERLY WINDS GUSTING UP TO 15KTS (17MPH). HIGH TEMP IN LOW 100S, LOW TEMP IN MID 70S.			
WESTERN TRAINING AREA FORECAST					
ROUTE	WIND / VISIBILITY / SIG WEATHER / SKY CONDITION (AGL)				
YELLOW ROUTE	15012 7 CLR // AFT 01Z 15006 7 CLR				
RED ROUTE	15012 7 CLR // AFT 01Z 15006 7 CLR				
BLUE ROUTE	15012 7 CLR // AFT 01Z 15006 7 CLR				
GREEN ROUTE	15012 7 CLR // AFT 01Z 15006 7 CLR				
NOTE: ABOVE CONDITIONS ARE THE MINIMUM EXPECTED					
CALL 3 WS AT DSN 738-9630/9400, COM 288-9630/9400 FOR AN OFFICIAL FLIGHT WEATHER BRIEF CLICK HERE FOR LATEST WEATHER WATCHES, WARNINGS, AND ADVISORIES (OR GO TO 3 WS WEBPAGE)					

HOME

IMAGES BELOW DO NOT DEPICT ACTUAL CONDITIONS
 CLICK ON THUMBNAIIS FOR CURRENT INFORMATION

<p>FORT HOOD WEATHER</p> <p>*FORT HOOD WEATHER WATCHES, WARNINGS, AND ADVISORIES (WVA)</p> <p>Click above for active Weather Watches, Warnings, and Advisories for Fort Hood</p> <p>*KGRK OBSERVATION & TAF</p> <p>*KHLR OBSERVATION</p> <p>*Denotes .mil access required</p> <p>AVIATION WEATHER</p> <p>PILOT REPORTS (PIREPS)</p> <p>AIRMET/SIGMETs</p> <p>SPACE WEATHER IMPACTS</p> <p>CLICK BELOW FOR FLIGHT WEATHER BRIEFINGS OR OTHER REQUESTS FOR WEATHER SUPPORT:</p>	<p>MISSION EXECUTION FORECAST/5-DAY FORECAST</p> <table border="1"> <tr> <td>Mission Execution Forecast</td> <td>5-Day Forecast</td> </tr> <tr> <td></td> <td></td> </tr> </table>	Mission Execution Forecast	5-Day Forecast			<p>BRIEFINGS</p> <p>SEMI-ANNUAL AVIATION WEATHER BRIEF (SUMMER)</p> <p>SEMI-ANNUAL AVIATION WEATHER BRIEF (WINTER)</p> <p>AIR TRAFFIC CONTROL WEATHER TRAINING</p> <p>MANUAL WEATHER OBSERVING - JET</p> <p>DRY-LINE FORECASTING 3 WS MTRF/RIRF DRYLINE EXAMPLE</p> <p>TURBULENCE--AIRCRAFT CATEGORIES</p> <p>RADAR IMAGES TORNADO 25APR11</p> <p>PERFORMANCE METRICS: HOW WELL ARE WE FORECASTING?</p> <p>DoD WEATHER</p>
Mission Execution Forecast	5-Day Forecast					

Click here

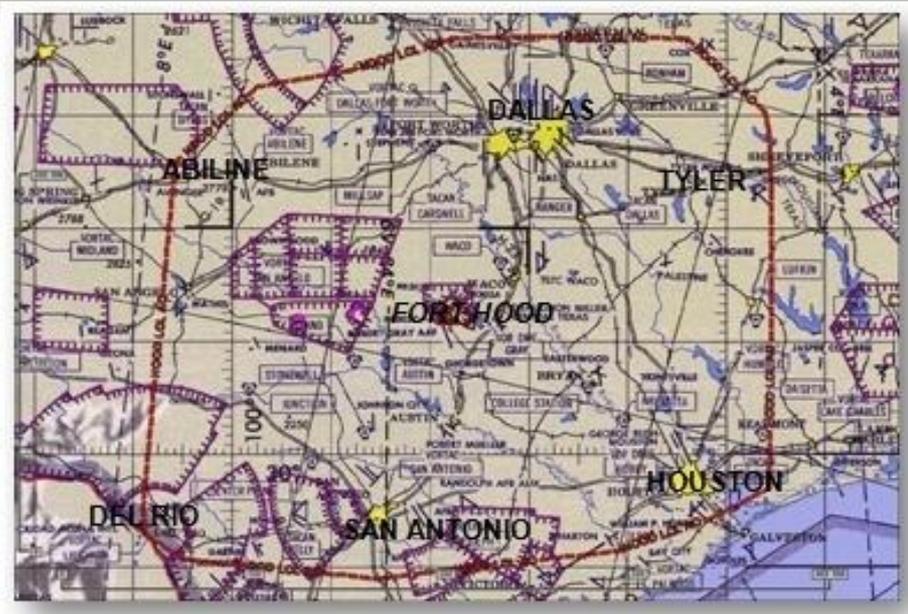
www.hood.army.mil/3ws/Flimsy/MEF.pdf



MWP – Flight Hazards

FLIGHT HAZARDS WITHIN ~150NM OF FORT HOOD (LOCAL FLYING AREA IAW FHR95-1)				
<i>HAIL, SEVERE TURBULENCE & ICING, HEAVY PRECIP, LIGHTNING & WIND SHEAR EXPECTED IN & NEAR THUNDERSTORMS</i>				
HAZARD	LEVEL (MSL)		INTENSITY/COVERAGE	LOCATION
TSTMS	MAX TOPS	450	ISOLD	NORTH OF A LINE FROM CLL-GRK-SJT
ICING	060-160		LGT RIME	N1/2 LOCAL FLYING AREA (N OF AUS) TIL 21Z
TURBC CAT II	SFC-080//180-400		LGT-MDT // MDT	ENTIRE LFA TO INCLUDE FORT HOOD RES TIL 00Z
TURBC CAT I	SFC-080		MDT	ENTIRE LFA TO INCLUDE FORT HOOD RES TIL 00Z

CAT II AIRCRAFT (UH-60, AH-64, CH-47, BE-20, UC-35, C-208) // CAT I AIRCRAFT (UH-1, OH-58, HUNTER UAS, SHADOW UAS)
 NOTE: AN AIRCRAFT'S WEIGHT, AIRSPEED, AND/OR ALTITUDE MAY CHANGE ITS TURBULENCE CATEGORY FROM ITS DEFAULT VALUE



Local Flying Area (LFA) – FHR95-1



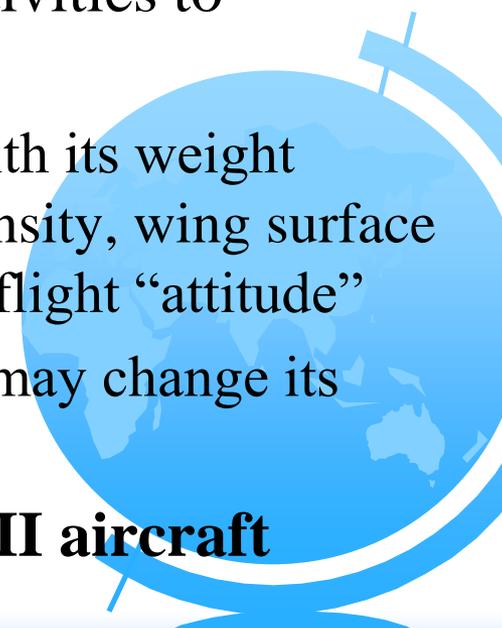
MWP – Turbulence



FLIGHT HAZARDS WITHIN ~150NM OF FORT HOOD (LOCAL FLYING AREA IAW FHR95-1)				
HAIL, SEVERE TURBULENCE & ICING, HEAVY PRECIP, LIGHTNING & WIND SHEAR EXPECTED IN & NEAR THUNDERSTORMS				
HAZARD	LEVEL (MSL)		INTENSITY/COVERAGE	LOCATION
TSTMS	MAX TOPS	450	ISOLD	NORTH OF A LINE FROM CLL-GRK-SJT
ICING	060-160		LGT RIME	N1/2 LOCAL FLYING AREA (N OF AUS) TIL 21Z
TURBC CAT II	SFC-080//180-400		LGT-MDT // MDT	ENTIRE LFA TO INCLUDE FORT HOOD RES TIL 00Z
TURBC CAT I	SFC-080		MDT	ENTIRE LFA TO INCLUDE FORT HOOD RES TIL 00Z

CAT II AIRCRAFT (UH-60, AH-64, CH-47, BE-20, UC-35, C-208) // CAT I AIRCRAFT (UH-1, OH-58, HUNTER UAS, SHADOW UAS)
NOTE: AN AIRCRAFT'S WEIGHT, AIRSPEED, AND/OR ALTITUDE MAY CHANGE ITS TURBULENCE CATEGORY FROM ITS DEFAULT VALUE

- Different types of aircraft have different sensitivities to turbulence
 - An aircraft's sensitivity varies considerably with its weight (amount of fuel, cargo, munitions, etc.), air density, wing surface area, wing sweep angle, airspeed, and aircraft flight "attitude"
 - An aircraft's weight, airspeed, and/or altitude may change its turbulence category from its default value
- **Turbulence forecasts in TAFs are for CAT II aircraft**





UAS (Shadow) MWP



- Use 3 WS MEF (Flimsy) for mission planning
- Contact RGAAF weather station for actual flight weather briefs
 - Provide Unit, Phone #, Location (i.e., LSCS), Aircraft Tail#, Launch/Landing Time, Flight Level, and Pilot Name

SHADOW UAS MISSION EXECUTION FORECAST MONTH/YEAR:

UNIT / PHONE#:

LOCATION:

TAIL #	LAUNCH DTG:	RECOVERY DTG:	FLIGHT LEVEL:
TEMP (C)		WIND/TEMP ALOFT (C)	
DEWPOINT (C)			2K MSL
RH (%)			4K MSL
ALSTG			6K MSL
PA			8K MSL
DA			10K MSL
SFC WIND--LAUNCH		THUNDERSTORMS	
SFC WIND--RECOVERY		TURBULENCE (CAT I Aircraft)	
MIN VIS / WX		ICING	
MIN CIG			
FREEZING LVL		BRIEF / VOID TIME	
WWA (#)		INITIALS BRIEFER/PILOT	
		EXTENDED TIME	
		INITIALS BRIEFER/PILOT	





UAS (Shadow) MWP



SHADOW UAS MISSION EXECUTION FORECAST

MONTH/YEAR:

UNIT / PHONE#:

LOCATION:

TAIL #	LAUNCH DTG:	RECOVERY DTG:	FLIGHT LEVEL:
TEMP (C)		WIND/TEMP ALOFT (C)	
DEWPOINT (C)			2K MSL
RH (%)			4K MSL
ALSTG			6K MSL
PA			8K MSL
DA			10K MSL
SFC WIND--LAUNCH		THUNDERSTORMS	
SFC WIND--RECOVERY		TURBULENCE (CAT I Aircraft)	
MIN VIS / WX		ICING	
MIN CIG			
FREEZING LVL		BRIEF / VOID TIME	
WWA (#)		INITIALS BRIEFER/PILOT	
		EXTENDED TIME	
		INITIALS BRIEFER/PILOT	

Minimum/worst conditions expected for the mission duration



Forecast Performance Metrics



- How well are we forecasting mission impacting weather?
- **Best measure of our performance is direct feedback from aircrews:**
 - Click on “Feedback Icon” on flimsy; send an E-mail
 - Complete Flight Weather Briefing Feedback Form on our webpage or faxed with all DD175-1s
 - Call RGAAF weather station NCOIC at 288-9166
- We’ll take good and bad comments!!!





Monthly Performance Metrics



Check out our monthly performance reports on our web site: www.hood.army.mil/3ws/MEFVERFeedback.ppt



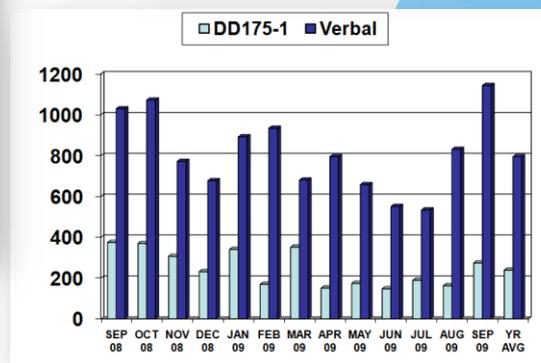
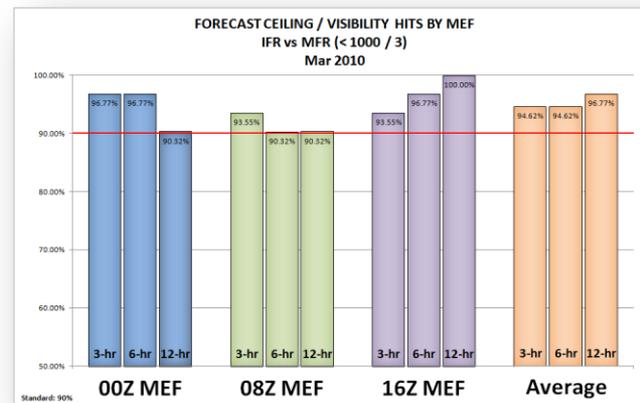
3^d Weather Squadron

Integrity - Service - Excellence



FORECAST PERFORMANCE METRICS

RGAAF Weather Station
February 2012





Objective Verification



☞ In addition to direct feedback we employ an objective method to measure (verify) our forecast performance:

☞ We selected three key operational parameters:

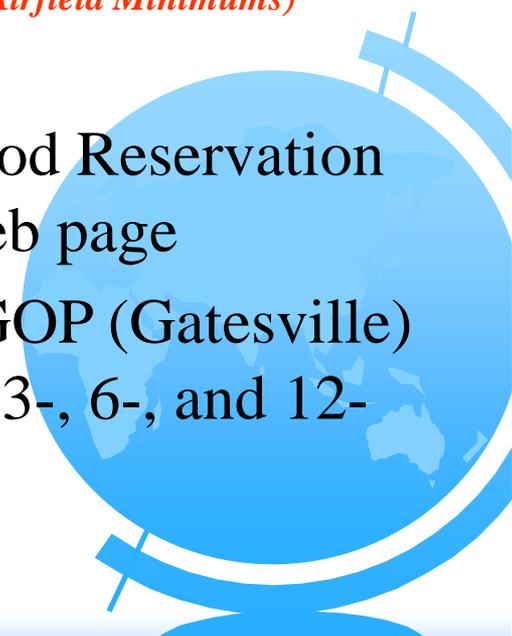
☞ **Ceiling / Visibility < 1000 feet / 3 miles (IFR)**

☞ **Ceiling / Visibility < 500 feet / 1/2 mile (HLR Airfield Minimums)**

☞ **Thunderstorms**

☞ We measure the accuracy of each Fort Hood Reservation Forecast (Flimsy) published on the 3 WS web page

☞ We use observations at GRK, HLR, and GOP (Gatesville) and any PIREPs to verify each flimsy at the 3-, 6-, and 12-hour point from the original issuance time

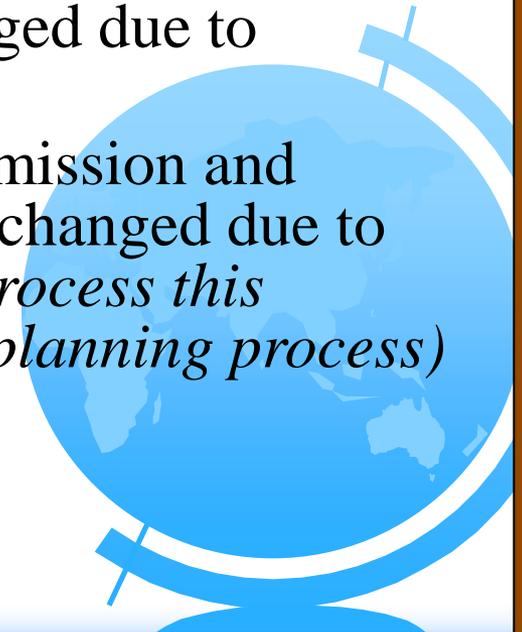




Did the Forecast or Weather Impact the Mission?



- ☞ Did we forecast **“GO”** weather for your mission and weather was a **“GO”** -- mission completed
- ☞ Did we forecast **“GO”** weather for your mission and weather was a **“NO GO”** -- mission cancelled or changed due to un-forecast weather
- ☞ Did we forecast **“NO GO”** weather for your mission and weather was **“GO”**-- mission cancelled or changed due to forecast (*lost opportunity or needless change*)
- ☞ Did we forecast **“NO GO”** weather for your mission and weather was **“NO GO”** -- mission cancelled or changed due to forecast/weather (*if inserted early in planning process this situation can prevent wasted time and enhance planning process*)



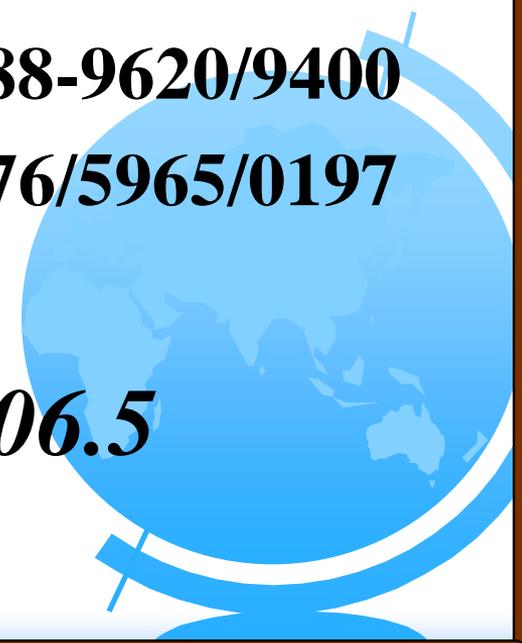


POCs



- 3 WS Commander: **288-1313**
- 3 WS Operations Officer: **287-7397**
- Operations Superintendent: **287-2948**
- RGAAF Weather Station NCOIC: **288-9166**
- RGAAF Weather Station: **288-9620/9400**
- Plans Section **288-9176/5965/0197**

Gray METRO: UHF 306.5





SUMMARY



- Local Area Influences
- Summer Climatology
- Hazards
- Training Areas
- Watches/Warnings/Advisories
- Weather Operations
- POCs



THE END



Any question or comments?

