



Fort Hood Semi-Annual Weather Briefing



SUMMER TRANSITION SEASON



3rd Combat Weather Squadron

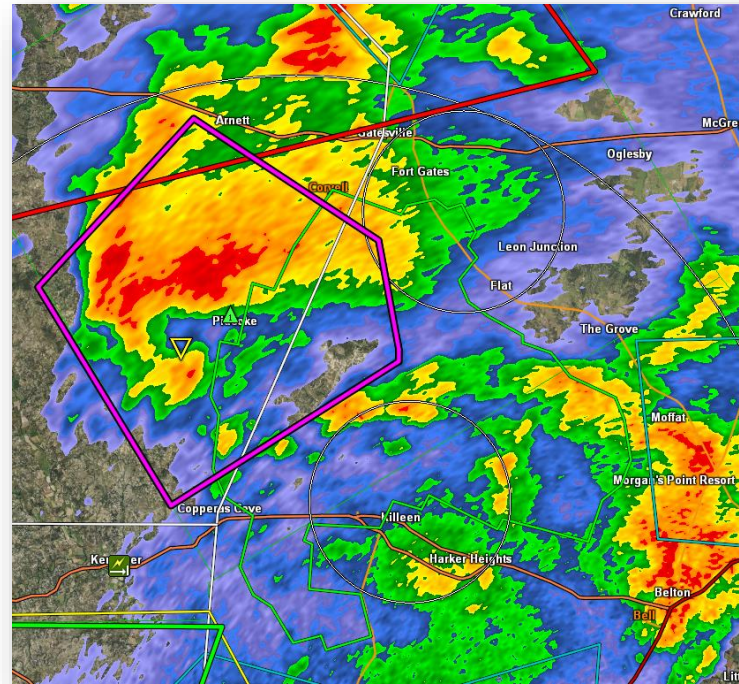




OVERVIEW



- ➡ Local Area Influences
- ➡ Summer Climatology
- ➡ Hazards
- ➡ Training Areas
- ➡ Watches/Warnings/Advisories





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

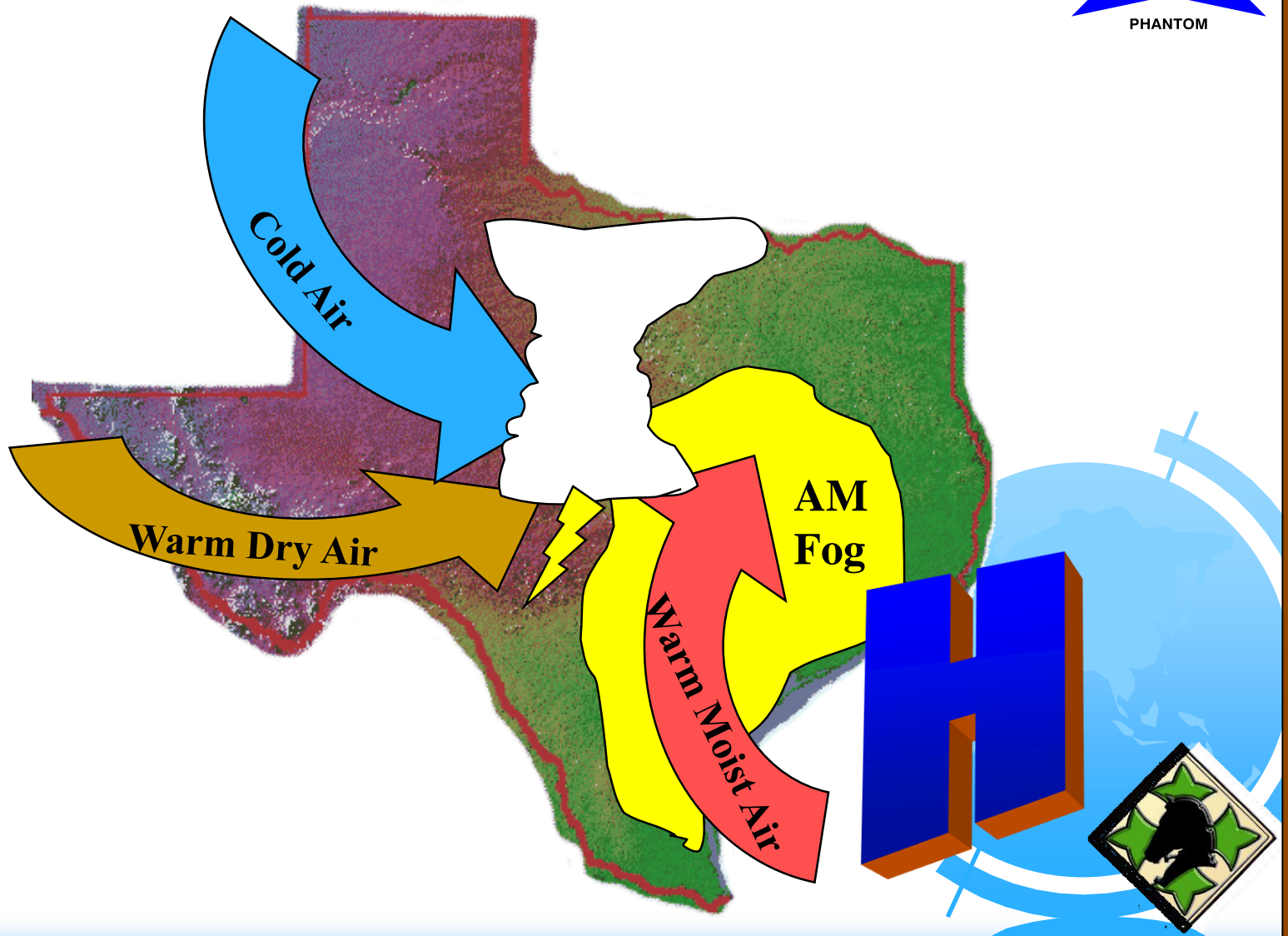


- ☞ Rolling hills with peaks up to 1,500'
- ☞ Large lake areas and abundant foliage
 - Act as moisture sources for thunderstorms and fog
- ☞ Flat basin surrounded by hills
- ☞ "I-35 Rule" - Storms dissipate over us; regenerate or intensify east of I-35
- ☞ Isolated weather conditions throughout reservation
 - 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





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

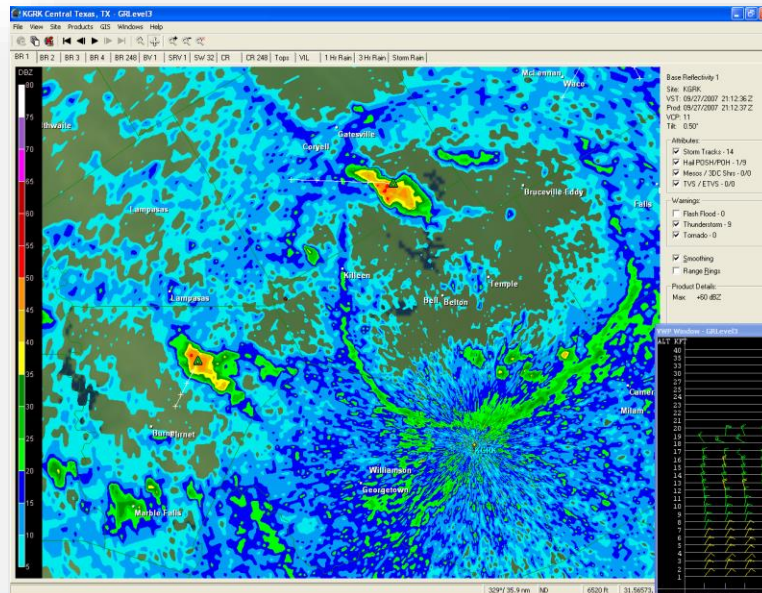




Summer Weather (Cont)



- ➡ 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
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Temperature

Mean Max (F)	86	94	95	97	90
Mean Min (F)	65	72	74	75	69
Extm Max (F)	102	108	109	108	111

Precipitation

Mean Month (in)	4.3	3.4	2.0	2.4	2.5
Mean # TS Days	7	5	6	5	3
Mean # Fog Days	12	6	8	5	8





CEILING CLIMO

(< 3,000 Ft)



% Ceiling < 3000 ft

Name: ROBERT GRAY AAF, TX UNITED STATES Network Type: ICAO
Platform ID: KGRK Lat: 31.067 Lon: -97.829 Time Offset: -6.00
Data Derived from 14WS Surface Observation Database / POR: 1973 - 2013

14WS (557 WW)
151 Patton Ave, Rm 120
Asheville, NC 28801-5002

23Z (17L)	26	25	21	15	11	4	2	2	9	14	19	25
22Z (16L)	27	27	20	16	10	5	2	1	9	14	19	25
21Z (15L)	29	28	23	17	12	5	2	3	10	14	21	27
20Z (14L)	33	30	27	19	13	7	3	4	10	16	23	30
19Z (13L)	35	34	30	24	15	8	4	5	13	21	27	32
18Z (12L)	37	37	35	29	21	10	5	6	15	24	29	33
17Z (11L)	41	43	40	35	29	14	7	7	19	29	34	35
16Z (10L)	43	46	46	40	36	18	10	10	24	35	40	38
15Z (09L)	43	48	48	46	44	26	15	13	31	39	42	40
14Z (08L)	43	47	49	50	50	33	19	16	33	43	43	40
13Z (07L)	43	48	48	49	50	34	18	15	31	43	43	41
12Z (06L)	42	47	49	50	51	33	18	13	31	43	41	39
11Z (05L)	42	45	46	48	51	37	18	13	26	39	40	39
10Z (04L)	42	44	46	45	49	36	18	11	26	36	38	39
09Z (03L)	39	42	45	42	44	30	15	10	24	35	37	38
08Z (02L)	38	39	43	39	40	27	11	8	21	32	37	37
07Z (01L)	38	39	40	36	35	20	9	5	18	29	36	35
06Z (00L)	36	36	36	32	28	15	6	4	13	23	32	32
05Z (23L)	34	33	33	29	23	11	3	3	11	21	30	32
04Z (22L)	31	30	28	23	16	6	2	2	9	18	27	30
03Z (21L)	30	27	22	19	13	5	2	2	8	16	22	28
02Z (20L)	27	27	21	13	12	4	2	2	7	14	19	27
01Z (19L)	26	24	21	15	11	3	2	2	7	13	18	25
00Z (18L)	26	24	21	14	10	3	2	2	7	13	17	23

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





CEILING CLIMO

(< 1,000 Ft)



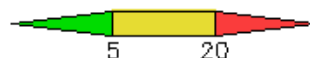
% Ceiling < 1000 ft

Name: ROBERT GRAY AAF, TX UNITED STATES Network Type: ICAO
Platform ID: KGRK Lat: 31.067 Lon: -97.829 Time Offset: -6.00
Data Derived from 14WS Surface Observation Database / POR: 1973 - 2013

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

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





VISIBILITY CLIMO

(< 3 SM)



% Visibility < 3 SM

Name: ROBERT GRAY AAF, TX UNITED STATES Network Type: ICAO
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 Data Derived from 14WS Surface Observation Database / POR: 1973 - 2013

14WS (557 WW)
 151 Patton Ave, Rm 120
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23Z (17L)	10	7	5	2	2	1	1	1	3	3	4	10
22Z (16L)	9	7	4	2	2	1	1	1	2	2	4	8
21Z (15L)	8	7	5	2	3	1	1	1	2	2	4	8
20Z (14L)	9	6	5	3	1	1	1	1	3	2	4	8
19Z (13L)	11	7	6	4	1	1	1	1	2	3	5	9
18Z (12L)	10	7	8	3	2	1	1	1	2	3	4	9
17Z (11L)	14	10	8	4	2	1	1	0	3	4	6	9
16Z (10L)	16	13	9	6	4	1	1	1	3	6	9	13
15Z (09L)	18	16	12	9	5	1	1	1	4	10	13	16
14Z (08L)	19	18	15	11	6	2	1	2	6	14	16	16
13Z (07L)	18	19	15	14	9	4	3	3	9	17	17	15
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11Z (05L)	14	13	12	8	8	5	3	2	4	9	13	12
10Z (04L)	16	13	10	7	5	3	2	1	4	7	10	12
09Z (03L)	15	13	9	6	3	2	2	1	3	7	10	11
08Z (02L)	13	11	9	5	2	1	1	0	2	6	8	10
07Z (01L)	13	10	9	3	3	1	1	1	2	5	7	11
06Z (00L)	13	9	7	4	3	1	0	0	1	4	6	11
05Z (23L)	12	7	6	4	2	1	0	0	1	4	6	12
04Z (22L)	11	8	5	4	1	1	0	0	1	4	6	11
03Z (21L)	10	7	5	3	1	1	0	0	2	3	5	9
02Z (20L)	8	8	5	2	1	1	0	1	2	3	5	9
01Z (19L)	9	7	6	3	2	1	0	0	2	2	4	8
00Z (18L)	9	8	6	3	2	1	0	0	3	2	4	7

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





VISIBILITY CLIMO

(< 1/2 SM)



% Visibility < 1/2 SM

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14WS (557 WW)
151 Patton Ave, Rm 120
Asheville, NC 28801-5002

23Z (17L)	1	1	0	0	0	0	0	0	0	0	1	2
22Z (16L)	1	1	0	0	0	0	0	0	0	0	0	1
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19Z (13L)	1	0	0	0	0	0	0	0	0	0	0	2
18Z (12L)	1	0	1	0	0	0	0	0	0	0	1	2
17Z (11L)	2	1	2	0	0	0	0	0	0	0	1	2
16Z (10L)	3	2	2	0	0	0	0	0	0	0	2	3
15Z (09L)	5	3	2	1	0	0	0	0	0	1	3	3
14Z (08L)	6	4	3	1	1	0	0	0	0	3	5	5
13Z (07L)	5	5	4	2	1	0	0	0	1	3	5	5
12Z (06L)	5	4	4	2	2	1	0	0	2	2	5	4
11Z (05L)	4	4	2	1	1	1	0	0	1	1	4	3
10Z (04L)	5	3	2	1	1	0	0	0	0	1	3	3
09Z (03L)	4	3	2	1	0	0	0	0	0	1	2	3
08Z (02L)	4	3	2	1	0	0	0	0	0	1	2	3
07Z (01L)	4	2	2	1	0	0	0	0	0	1	1	3
06Z (00L)	4	2	1	1	0	0	0	0	0	1	1	3
05Z (23L)	3	1	1	0	0	0	0	0	0	1	2	3
04Z (22L)	3	1	1	0	0	0	0	0	0	1	1	2
03Z (21L)	2	1	0	0	0	0	0	0	0	1	1	2
02Z (20L)	2	1	0	0	0	0	0	0	0	1	0	2
01Z (19L)	2	1	0	0	0	0	0	0	0	0	0	2
00Z (18L)	1	1	0	0	0	0	0	0	0	0	1	2
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec





ARMORED CORP.

Aviation Hazards





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)**





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 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)





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
- ➡ 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



A black helicopter is shown in flight against a light blue sky. The helicopter is viewed from a slightly elevated front angle. It has a main rotor and a tail rotor. Four large, dark, cylindrical objects are mounted on the sides of the fuselage. The text "Weather Alerts" is overlaid in a large, white, 3D font, slanted diagonally across the center of the image.

Weather Alerts



WEATHER WATCHES



☞ Special notice for **potential** of environmental conditions/threats of such intensity as to pose hazard to life or property

- Issued for *Fort Hood Reservation and Western Training Area (WTA)*
- Valid times and area described in the text

☞ **Command decision on whether or not operations are altered (FHR95-1)**



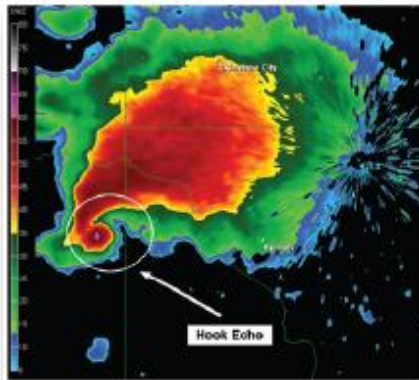


WEATHER WARNINGS



☞ Special notice when an established weather condition/threat of such intensity as to pose a hazard to life or property is **occurring or is expected to occur (*imminent*)**

- Take actions to protect property and life
- Valid times and area described in the text





WEATHER ADVISORIES



➡ Observed Advisories provide specific notice to an operational agency of weather phenomena *impacting operations*

- Issued when condition is observed by Doppler weather radar, weather sensors, or PIREPs
- Valid for area described in the text
- Valid “Until Further Notice” and will be cancelled when the condition is no longer occurring





Fort Hood Reservation

Watch / Warning / Advisory

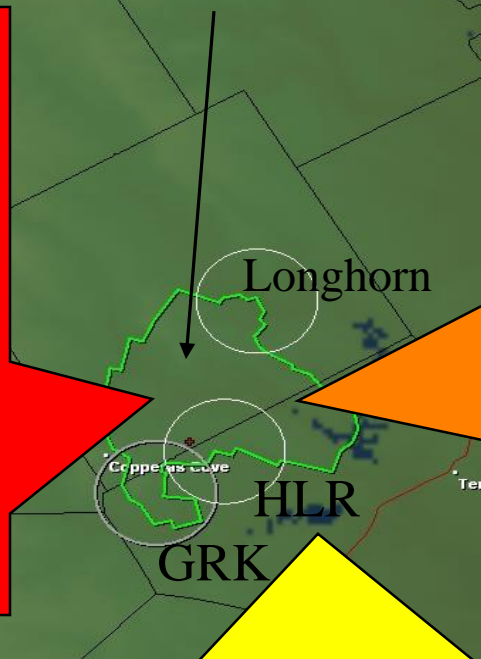


WEATHER WARNINGS:

- Tornado / Funnel Cloud (15 min)
- Severe TSTM (1 hr)
- Damaging Wind ≥ 45 kts (1 hr)
- Moderate (Strong) TSTM (1 hr)
- Strong Wind 35-44 kts (1 hr)
- Freezing Precipitation (1 hr)
- Heavy Rain 2 in w/i 12 hr (1 hr)
- Heavy Snow 2 in w/i 12 hr (1 hr)
- Lightning (Observed)

*Note: Lightning Warning
will specify if it includes
RGAAF and HAAF or not*

Fort Hood Reservation



WEATHER WATCH

(As potential warrants)

- Tornado / Funnel Cloud
- Severe TSTM
- Damaging Wind ≥ 45 kts
- Freezing Precipitation
- Lightning (30 min)

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 (Strong) 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

Watch / Warning

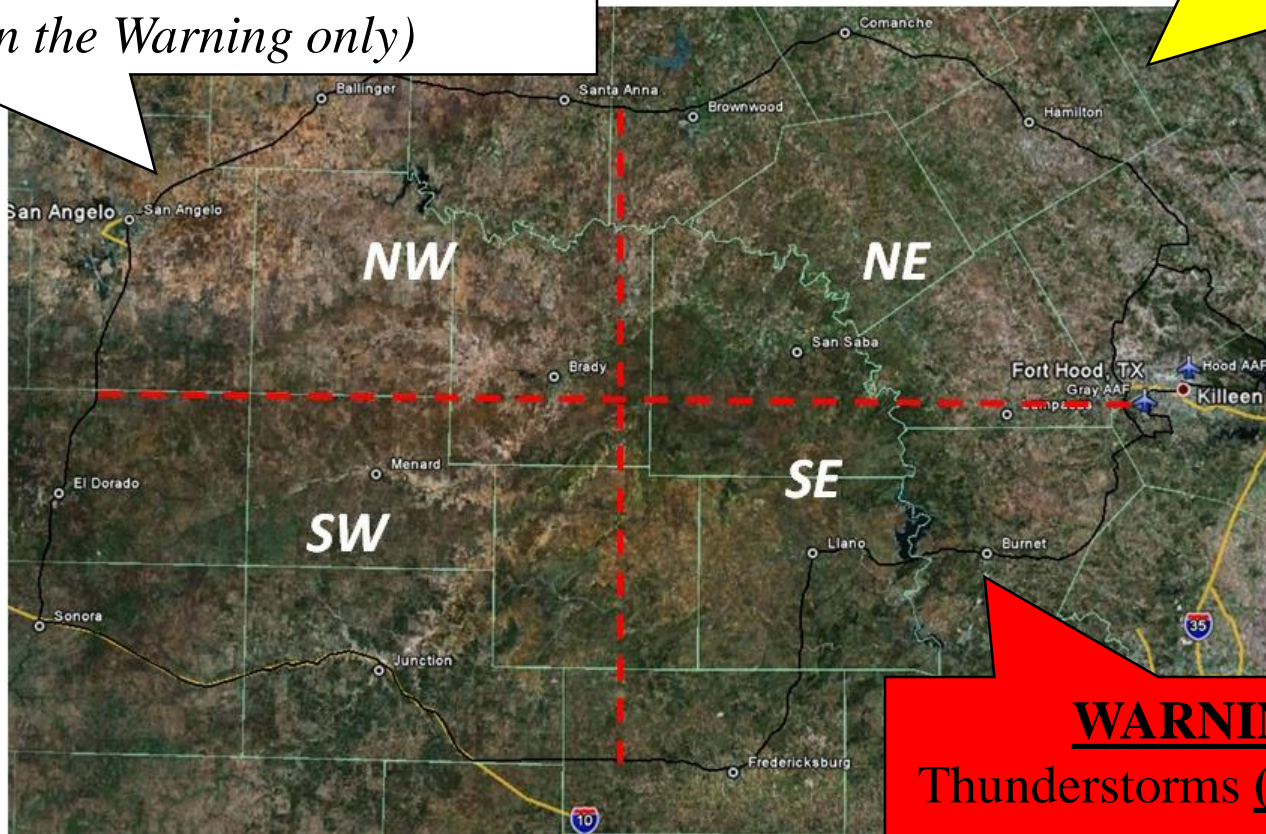


WTA

Divided into 4 sectors
(Text will specify area(s) impacted
in the Warning only)

WEATHER WATCH

Thunderstorms (2 hr advance notice)



WARNING:

Thunderstorms (Observed)



PILOT REPORTS (PIREPs)



☞ Provide forecasters additional observations for the local flying area

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

PLEASE CALL US!!!



☞ PMSV frequencies: **UHF 306.5**







RGAAF Weather Station Operations



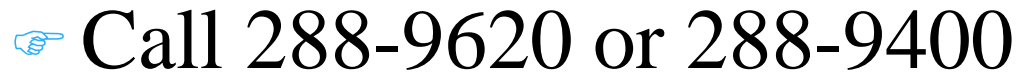
➡ RGAAF Weather Station located on West Fort Hood, Airfield Ops Bldg 90029:

- 24/7 Operations
- Usually 2 Forecasters Mon-Fri 0700-2300L
- 1 Forecaster Nights, Weekends, & Holidays
- KGRK / KHLR - Automated Weather Observations—augmented IAW FHR115-1
- Flight Weather Briefings



Gray METRO: UHF 306.5





 E-mail: usarmy.hood.3-asog.mbx.3w3-woc@mail.mil

👉 Please follow up
flight weather
briefing requests
sent via E-mail /
Fax with a phone
call

[illegible]



FLIGHT WEATHER BRIEFINGS (FHR95-1)



- ☞ All VFR/IFR DD Form 175 flight plans require a weather brief from an appropriate weather facility IAW AR 95-1
- ☞ Aviators are the only person(s) authorized to receive an official weather brief
- ☞ Weather briefings may be in person or telephonically
- ☞ In all cases, a weather void time of one and one-half hours apply; time may be extended IAW AR 95-1
- ☞ Requests for a DD Form 175-1 should be submitted **24 hours** prior to takeoff and will not be accepted any later than **2 hours** prior to takeoff





FLIGHT WEATHER BRIEFINGS (FHR95-1)



IFR:

- A local weather brief [verbal] is authorized for all IFR flights within a 50 nautical miles radius of RGAAF
- DD Form 175-1 is required when outside a 50 nautical mile radius of RGAAF

Helicopter VFR:

- A local weather brief [verbal] is authorized for all flights within the local flying area as defined by this regulation
- A DD Form 175-1 is required for all VFR flights outside the local flying area as defined by this regulation
- A DD Form 175-1 may be requested for any VFR flight





3D Combat Weather Squadron Homepage

<https://home.army.mil/hood/index.php/fort-hood-weather>





Fort Hood Home Page



Screenshot of the Fort Hood Home Page (https://home.army.mil/hood/index.php) showing the search bar and navigation menu.

The page header includes the U.S. Army Fort Hood logo and the tagline "Home of America's Hammer". A search bar is located in the top right corner, highlighted with a red circle and an arrow pointing to it. The search bar contains the text "SEARCH" and a magnifying glass icon.

The main content area features several sections:

- COOKS COMPLETE**: A photo of a person in a kitchen.
- THE GREAT PLACE**: A section describing Fort Hood as the Army's premier installation for training and deployment.
- CONNECT WITH FORT HOOD**: Social media links for Facebook, Instagram, and Twitter.

The footer contains a navigation menu with the following links:

- U.S. ARMY
- ARMY.MIL
- EMPLOYMENT
- FOIA
- TERMS OF USE
- ACCESSIBILITY/SECTION 508
- NEED HELP? TRY ARMY A-Z
- EQUAL EMPLOYMENT OPPORTUNITY
- Contact Us
- Page Last Modified: 4/5/19, 1:51 PM

Additional footer links include:

- EMERGENCY NUMBERS**
- SHARP** (Sexual Harassment / Assault Response & Prevention)
- ICE** (Interactive Customer Evaluation)
- Veterans Crisis Line**
- iSALUTE** (Report Suspicious Activity)
- U.S. ARMY**

On the right side of the footer, there is a section for **FORT HOOD** with links to:

- Home of America's Hammer
- FORT HOOD WEATHER** (highlighted with a red circle and an arrow pointing to it)
- III Corps Policies and Regulations
- GARRISON POLICIES AND REGULATIONS

Below these links is the **U.S. ARMY INSTALLATION MANAGEMENT COMMAND** logo and the text:

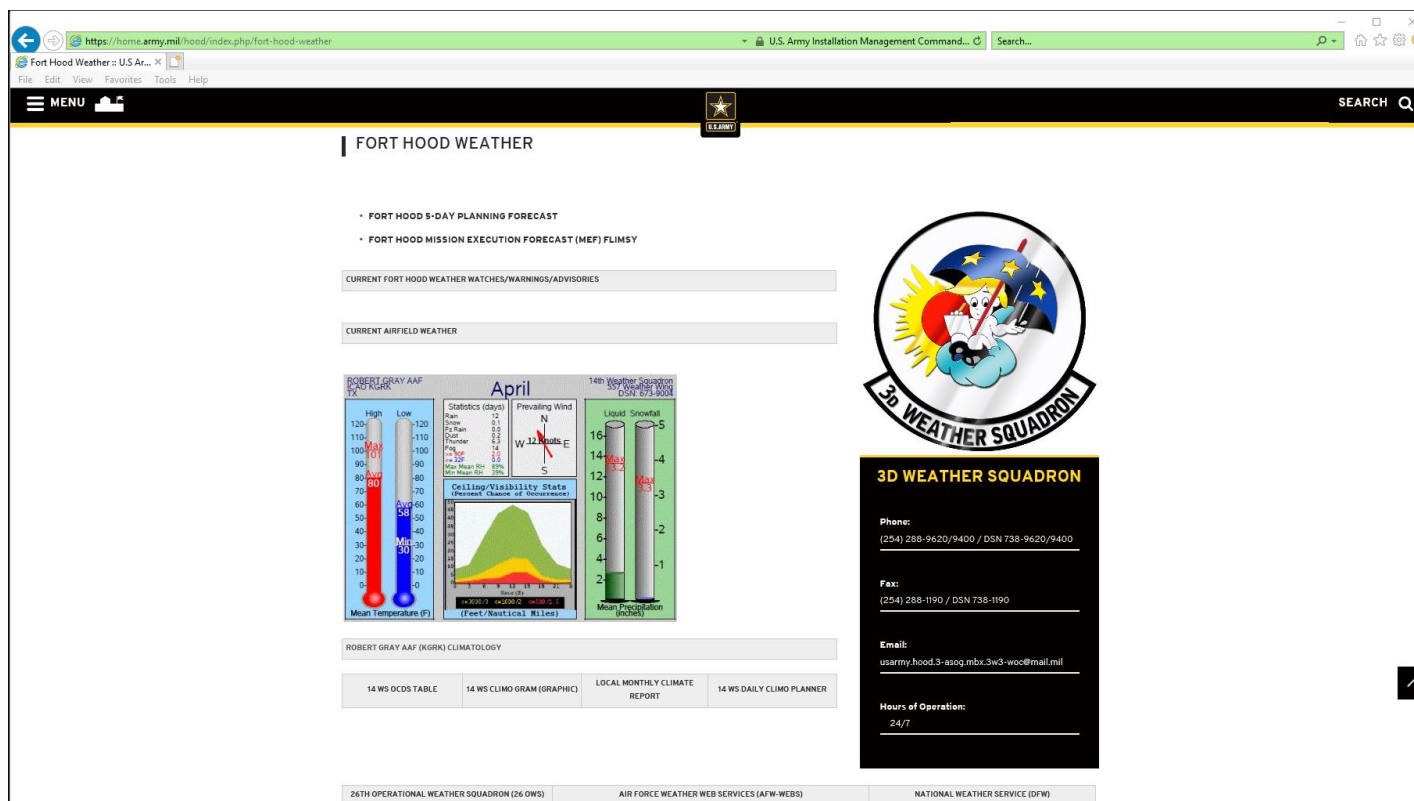
"We Are the Army's Home - Serving the Rugged Professional"

FIND A GARRISON

SURVIVOR OUTREACH SERVICES | GOLD STAR PINS | TOTAL ARMY SPONSORSHIP | PUBLIC WORKS DIGEST | ARMY OneSOURCE | SAFETY COLLEGE OF INSTALLATION MANAGEMENT | HUMAN RESOURCES | CAREER PROGRAM 29 | CIVILIAN EXPEDITIONARY WORKFORCE

U.S. ARMY ENVIRONMENTAL COMMAND | ASSISTANT SECRETARY OF THE ARMY FOR INSTALLATIONS, ENERGY & ENVIRONMENT | ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT

Search: Weather or scroll to bottom of page





3 WS Mission Weather Product (MWP) - Flimsy



➡ Located on our web page:

<https://home.army.mil/hood/index.php/fort-hood-weather>

➡ Updated 3 times daily (0000Z, 0800Z, 1600Z)

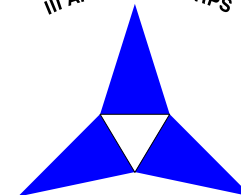
➡ ***IMPORTANT: Check 3 CWS website periodically for changes especially during inclement weather***



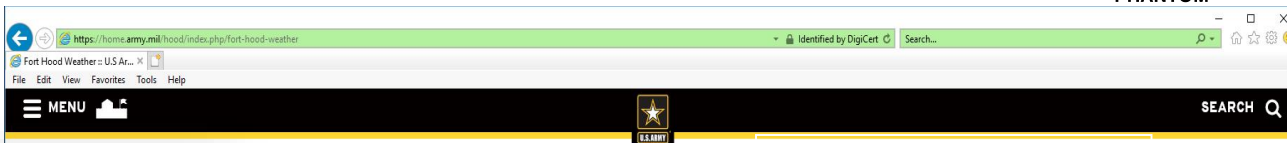


MWP (3 WS Flimsy)

III ARMORED CORPS



PHANTOM



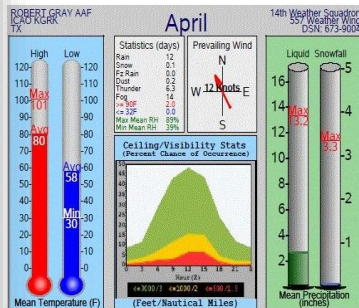
3d WEATHER SQUADRON - FORT HOOD MISSION PLANNING / EXECUTION FORECAST																							
DATE:	1-Sep-05		VALID TIME:		150000Z-200000Z		MEF #:		01		B	REV #:		TIME:									
FORECASTER:	SSA SMITH		3d WS Homepage:		www.3dws.com/forecast										IGAF METHOD:	306.5 UNIF							
SOLAR / LUNAR DATA													SPACE WEATHER IMPACTS										
DATE	BMINT	SR	SS	EENT	MR	MS	ILLUM	MOON ANGLE 2.5m		GPS	G			Unlikely Degradation									
1-Sep-05	0648L	0204L	9554L	3047L	0730L	3015L	4%	DAYLIGHT		LNF	G			Unlikely Degradation									
1-Sep-05	0651L	0205L	9553L	3046L	0815L	3048L	3%	DAYLIGHT		HF	G			Unlikely Degradation									
FLIGHT LEVEL WINDS (KNOTS) AND TEMPERATURES (°C) - FORT HOOD RESERVATION																							
5,000' AGL	1,000' AGL	2,000' AGL	3,000' AGL	4,000' AGL	5,000' MSL	6,000' MSL	8,000' MSL	10,000' MSL	12,000' MSL	14,000' MSL	16,000' MSL	18,000' MSL	20,000' MSL	22,000' MSL	24,000' MSL								
15005	327C	15005	347C	15040	257C	15095	277C	17005	187C	17005	197C	19000	097C	19000	077C								
FLIGHT HAZARDS FOR LOCAL FLYING AREA (IAW FHR 95-1)																							
HAZ, SEV, TURB, INC, HEAVY PRECIP, LIGHTNING & WIND SHEAR EXPECTED IN A NEAR 1000000																							
CAT II ACT: MCIL, MCIC // CAT II ACT: UN44, UN45, UN46, UN47, UN48, UN49, UN50, UN51, UN52, UN53, UN54, UN55, UN56, UN57, UN58, UN59, UN60, UN61, UN62, UN63, UN64, UN65, UN66, UN67, UN68, UN69, UN70, UN71, UN72, UN73, UN74, UN75, UN76, UN77, UN78, UN79, UN80, UN81, UN82, UN83, UN84, UN85, UN86, UN87, UN88, UN89, UN90, UN91, UN92, UN93, UN94, UN95, UN96, UN97, UN98, UN99, UN00													PLEASE PROVIDE FEEDBACK										
(TURBULENCE FORECASTS MUST BE CONVERTED FOR DIFFERENT CATEGORIES OF AIRCRAFT)																							
HAZARDS													INTENSITY/COVERAGE			LEVELS (MSL)			LOCATION				
THUNDERSTORMS				ISOLATED				MAX TOPS				450				EAST OF 155 APT 482							
ICING				LGT				LGT RIME				150-240				SOUTH OF A LINE 517-AUS-HOU							
TURBULENCE (CAT II)				LGT				SFC-500				ENTIRE LOCAL FLYING AREA APT 152				MIN FREEZING LEVEL							
LLWS				09-15Z				SFC-500 AGL				WITHIN 50NM OF FORT HOOD				950				MSL			
PORT HOOD RESERVATION AREA FORECAST (INCLUDES IGAF, HAAR, LONGHORN AND SHORTHORN AUXILIARY AIRFIELDS)																							
VALID TIME	MIN CG (AGL)	MIN VIS (nm)	SIG WX	SURFACE WIND		MAX TEMP		MAX DPT		RH %	MIN ALSTG	IGAF	HAAR										
						°C	°F	°C				MAX PA	MAX DA	MAX PA	MAX DA								
150000Z-160000Z	001	1/4	FG	10005		33	73	23	100L	29.92	1015 ft	2423 ft	925 ft	2423 ft									
160000Z-170000Z	001	1/4	FG	10005		33	75	23	100L	29.92	1015 ft	2423 ft	925 ft	2423 ft									
170000Z-180000Z	003	1/2	FG	12007		34	75	23	94L	29.92	1015 ft	2423 ft	925 ft	2557									
180000Z-190000Z	005	7		18015		37	81	31	70L	29.92	1015 ft	2423 ft	925 ft	2599									
190000Z-200000Z	005	7		18015		38	82	30	63L	29.92	1015 ft	2423 ft	925 ft	3107									
200000Z-210000Z	005	7		18015		38	82	30	53L	29.88	1015 ft	2423 ft	925 ft	3400									
PORT HOOD PLAIN LANGUAGE FORECAST / OUTLOOK FOR THE NEXT 24 HOURS																							
DENSE MORNING FOG AND LIGHT EAST WIND WILL GIVE WAY TO PARTLY SUNNY SKIES; BREEZY SOUTH WIND AFT 15 TO 30 MPH GUSTING 30 TO 35 MPH BY LATE MORNING INTO THE AFTERNOON. HIGH TEMPERATURE TODAY IN THE MID TO UPPER 80S. EXPECT PARTLY CLOUDY SKIES EARLY THIS EVENING BECOMING MOSTLY CLOUDY LATE WITH SLIGHT CHANCE OF SCATTERED RAINSHOWERS AFTER MIDNIGHT. DIMINISHING WIND AFTER SUNSET FROM THE SOUTHEAST AFT 15 TO 15 MPH. MILD AND HUMID OVERNIGHT WITH LOW TEMPERATURE IN THE LOW 70S.																							
TEST FLIGHT AREA (TFA) // (IAW FHR 95-1)																							
VALID TIME	150000Z-160000Z																						
LOCATION	THAI		THAI		THAI		THAI		LOCATION		NE		SE		SW		NW						
MIN CG (AGL)	030		030		030		030		MIN CG (AGL)		030		030		NONE		NONE						
MIN VIS (SM)	3		3		3		3		MIN VIS (SM)		1		1		7		7						
SIG WX	FG		FG		FG		FG		SIG WX		FG		FG										
SFC WIND	10005		10005		10005		10005		SFC WIND		10005		10005		1910L		1902L						
WESTERN TRAINING AREA (TFA) // (IAW FHR 95-1)																							
VALID TIME	150000Z-160000Z																						
LOCATION	THAI		THAI		THAI		THAI		LOCATION		NE		SE		SW		NW						
MIN CG (AGL)	030		030		030		030		MIN CG (AGL)		030		030		NONE		NONE						
MIN VIS (SM)	3		3		3		3		MIN VIS (SM)		3		3		7		7						
SIG WX	FG		FG		FG		FG		SIG WX		FG		FG										
SFC WIND	18005		G25		18005		G30		SFC WIND		18005		G25		19005		G25						
TEST FLIGHT AREA (TFA) // (IAW FHR 95-1)																							
VALID TIME	160000Z-170000Z																						
LOCATION	THAI		THAI		THAI		THAI		LOCATION		NE		SE		SW		NW						
MIN CG (AGL)	030		030		030		030		MIN CG (AGL)		030		030		NONE		NONE						
MIN VIS (SM)	7		7		7		7		MIN VIS (SM)		3		3		7		7						
SIG WX									SIG WX														
SFC WIND	18005		G25		18005		G30		SFC WIND		18005		G25		19005		G25						
WESTERN TRAINING AREA (TFA) // (IAW FHR 95-1)																							
VALID TIME	160000Z-170000Z																						
LOCATION	THAI		THAI		THAI		THAI		LOCATION		NE		SE		SW		NW						
MIN CG (AGL)	030		030		030		030		MIN CG (AGL)		030		030		NONE		NONE						
MIN VIS (SM)	7		7		7		7		MIN VIS (SM)		3		3		7		7						
SIG WX									SIG WX														
SFC WIND	18005		G25		18005		G30		SFC WIND		18005		G25		19005		G25						

FORT HOOD WEATHER

- FORT HOOD 5-DAY PLANNING FORECAST
- FORT HOOD MISSION EXECUTION FORECAST (MEF) FLIMS

CURRENT FORT HOOD WEATHER WATCHES/WARNINGS/ADVISORIES

CURRENT AIRFIELD WEATHER



ROBERT GRAY AAF (KGRK) CLIMATOLOGY

14 WS OCDS TABLE

14 WS CLIMO GRAM (GRAPHIC)

LOCAL MONTHLY CLIMATE REPORT

14 WS DAILY CLIMO PLANNER

Click here



3D WEATHER SQUADRON

Phone:

(254) 288-9620 / 9400 / DSN 738-9620 / 9400

Fax:

(254) 288-1190 / DSN 738-1190

Email:


usarmy.hood.3-esog.mbx.3w3-woc@mail.mil





MWP – Flight Hazards



HAIL, SEVERE TURB/ICING, HEAVY PRECIP, LIGHTNING & WIND SHEAR EXPECTED IN & NEAR T-STORMS					PLEASE PROVIDE FEEDBACK	
CAT III ACFT: MC-12, MQ-1C // CAT II ACFT: UH-60, AH-64, CH-47, UC-35, C-208 // CAT I ACFT: RQ-7 (Shadow) (TURBULENCE FORECASTS MUST BE CONVERTED FOR DIFFERENT CATAGORIES OF AIRCRAFT)						
HAZARDS	INTENSITY/COVERAGE	LEVELS (MSL)		LOCATION		
THUNDERSTORMS	ISOLATED	MAX TOPS	450	EAST OF I35 AFT 18Z		
ICING	LGT RIME	130 - 240		SOUTH OF A LINE SJT - AUS - HOU		
TURBULENCE (CAT II)	LGT	SFC-030		ENTIRE LOCAL FLYING AREA AFT 15Z	MIN FREEZING LEVEL	
LLWS	09-15Z	SFC-020 AGL		WITHIN 50NM OF FORT HOOD	130	MSL

- ✎ Flight hazards are for the Local Flying Area as defined in FHR95-1 and are color coded for the threat based on table below


FLIGHT HAZARDS FOR LOCAL FLYING AREA IMPACT CRITERIA			
Criteria	Green	Amber	Red
Thunderstorms	None		Any
Icing	None	Light	≥ Moderate
Turbulence (CAT II)	None - Light	Moderate	≥ Severe
LLWS	None	Forecast and/or Observed	





MWP – Turbulence



HAIL, SEVERE TURB/ICING, HEAVY PRECIP, LIGHTNING & WIND SHEAR EXPECTED IN & NEAR T-STORMS					PLEASE PROVIDE FEEDBACK	
CAT III ACFT: MC-12, MQ-1C // CAT II ACFT: UH-60, AH-64, CH-47, UC-35, C-208 // CAT I ACFT: RQ-7 (Shadow) (TURBULENCE FORECASTS MUST BE CONVERTED FOR DIFFERENT CATAGORIES OF AIRCRAFT)						
HAZARDS	INTENSITY/COVERAGE	LEVELS (MSL)		LOCATION		
THUNDERSTORMS	ISOLATED	MAX TOPS	450	EAST OF I35 AFT 18Z		
ICING	LGT RIME	130 - 240		SOUTH OF A LINE SJT - AUS - HOU		
TURBULENCE (CAT II)	LGT	SFC-030		ENTIRE LOCAL FLYING AREA AFT 15Z	MIN FREEZING LEVEL	
LLWS	09-15Z	SFC-020 AGL		WITHIN 50NM OF FORT HOOD	130	MSL

- ☞ 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"
- ☞ Turbulence forecasts are based on CAT II aircraft and must be converted for different categories of aircraft*



*Air Force Handbook 11-203, Volume 2 / Army Training Circular 3-04.96-2
Weather for Aircrews – Products and Services





MWP – Fort Hood Reservation Forecast



FORT HOOD RESERVATION AREA FORECAST (INCLUDES RGAAF, HAAF, LONGHORN AND SHORTHORN AUXILIARY AIRFIELDS)														
VALID TIME	MIN CIG (AGL)	MIN VIS (sm)	SIG WX	SURFACE WIND		MAX TEMP		MAX DPT	RH %	MIN ALSTG	RGAAF		HAAF	
						°C	°F	°C			MAX PA	MAX DA	MAX PA	MAX DA
0800Z - 0900Z	NONE	7		19010		22	72	10	46%	29.53	1379 ft	2848 ft	1288 ft	2735 ft
0900Z - 1000Z	NONE	7		19010		22	72	10	46%	29.51	1397 ft	2870 ft	1306 ft	2758 ft
1000Z - 1100Z	NONE	7		22008		21	70	11	53%	29.54	1369 ft	2704 ft	1278 ft	2592 ft
1100Z - 1200Z	NONE	7		24006		20	68	09	49%	29.60	1313 ft	2504 ft	1222 ft	2391 ft
1200Z - 1300Z	NONE	7		26006		19	66	07	46%	29.62	1295 ft	2350 ft	1204 ft	2237 ft
1300Z - 1400Z	NONE	7		27007		20	68	00	26%	29.65	1267 ft	2447 ft	1176 ft	2334 ft
1400Z - 1600Z	NONE	7		28012	G18	26	79	-06	12%	29.65	1267 ft	3243 ft	1176 ft	3131 ft
1600Z - 1800Z	NONE	7		28012	G20	26	79	-07	11%	29.66	1257 ft	3232 ft	1166 ft	3120 ft
1800Z - 2000Z	NONE	7		25015	G25	28	82	-09	8%	29.67	1248 ft	3491 ft	1157 ft	3379 ft

- Color coded based on forecast conditions/threat (12hr forecast)
- Forecast is for worse case conditions for the time period
- PA and DA specifically for RGAAF and HAAF



FORT HOOD RESERVATION FORECAST IMPACT CRITERIA			
Criteria	Green	Amber	Red
Minimum Ceiling	≥ 5,000	< 5,000	< 500
Minimum Visibility	≥ 5sm	< 5sm	< 1/2sm
Significant <u>Wx</u>	None	Any Precip	TS and/or FZ
Winds	< 25 <u>kts</u>	≥ 25 <u>kts</u>	≥ 45 <u>kts</u>





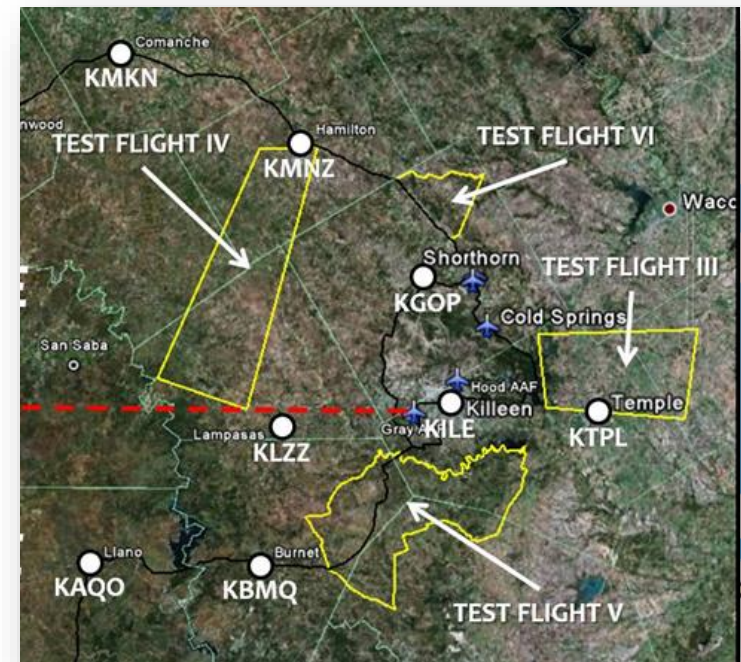
MWP – Maintenance Test Flight Areas



TEST FLIGHT AREA (TFA) // (IAW FHR 95-1)								
VALID TIME	0800 - 1200Z							
LOCATION	TFA III		TFA IV		TFA V		TFA VI	
MIN CIG (AGL)	NONE		NONE		NONE		NONE	
MIN VIS (SM)	7		7		7		7	
SIG WX								
SFC WND	19010		19010		19010		19010	
VALID TIME	1200 - 1600Z							
LOCATION	TFA III		TFA IV		TFA V		TFA VI	
MIN CIG (AGL)	NONE		NONE		NONE		NONE	
MIN VIS (SM)	7		7		7		7	
SIG WX								
SFC WIND	26008	G20	26008	G20	26008	G20	26008	G20
VALID TIME	1600 - 2000Z							
LOCATION	TFA III		TFA IV		TFA V		TFA VI	
MIN CIG (AGL)	NONE		NONE		NONE		NONE	
MIN VIS (SM)	7		7		7		7	
SIG WX								
SFC WIND	27010	G25	27010	G25	27010	G25	27010	G25

- Primary Test Flight Areas as defined in FHR95-1
- 4-hour forecasts color-coded based on the table below

TEST FLIGHT AREAS & WTA FORECAST IMPACT CRITERIA			
Criteria	Green	Amber	Red
Minimum Ceiling	≥ 3,000	< 3,000	< 1,000
Minimum Visibility	≥ 3sm		< 3sm
Significant <u>Wx</u>	None	Any Precip	TS and/or FZ
Winds	< 35 <u>kts</u>	≥ 35 <u>kts</u>	≥ 45 <u>kts</u>



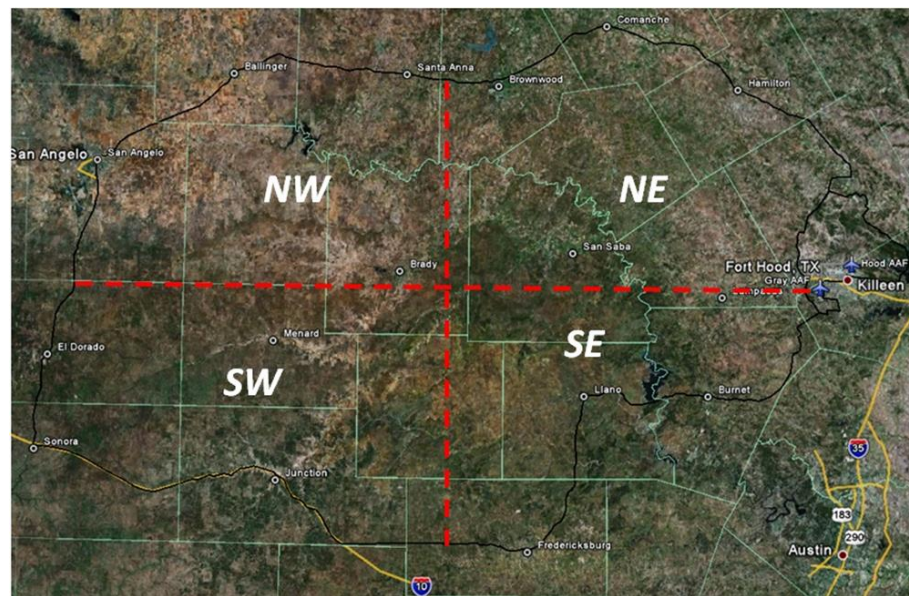


MWP – Western Training Area (WTA)



WESTERN TRAINING AREA // (IAW FHR 95-1)									
VALID TIME	0800 - 1200Z								
LOCATION	NE		SE		SW		NW		
MIN CIG (AGL)	NONE		NONE		NONE		NONE		
MIN VIS (SM)	7		7		7		7		
SIG WX									
SFC WND	19010		19010		19010		19010		
VALID TIME	1200 - 1600Z								
LOCATION	NE		SE		SW		NW		
MIN CIG (AGL)	NONE		NONE		NONE		NONE		
MIN VIS (SM)	7		7		7		7		
SIG WX									
SFC WIND	26008	G20	26008	G20	28015	G25	26010	G30	
VALID TIME	1600 - 2000Z								
LOCATION	NE		SE		SW		NW		
MIN CIG (AGL)	NONE		NONE		NONE		NONE		
MIN VIS (SM)	7		7		7		7		
SIG WX									
SFC WIND	27010	G25	27010	G25	27018	G30	26015	G30	

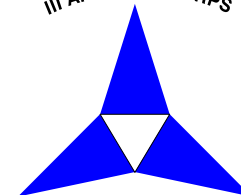
- WTA as defined by FHR95-1 (separated into 4-sections)
- 4-hour forecasts color-coded based on the table below



TEST FLIGHT AREAS & WTA FORECAST IMPACT CRITERIA			
Criteria	Green	Amber	Red
Minimum Ceiling	≥ 3,000	< 3,000	< 1,000
Minimum Visibility	≥ 3sm		< 3sm
Significant <u>Wx</u>	None	Any Precip	TS and/or FZ
Winds	< 35 kts	≥ 35 kts	≥ 45 kts



III ARMORED CORPS



PHANTOM

5-Day Forecast



Fort Hood 5-Day Weather Outlook & Effects

March Climatology

Avg Hi: 73F Avg Low: 50F

Avg Precip: 2.5 Inches

FOR PLANNING ONLY

FORT HOOD, TX 5-DAY FORECAST

AS OF 0300 HRS LOCAL 28 MAR 17

FORECAST	Tue 28 Mar 17				Wed 29 Mar 17				Thu 30 Mar 17				Fri 31 Mar 17				Sat 01 Apr 17			
	LO: 63F/17C		HI: 82F/28C		LO: 63F/17C		HI: 81F/27C		LO: 55F/13C		HI: 77F/25C		LO: 54F/12C		HI: 81F/27C		LO: 59F/15C		HI: 79F/26C	
	WIND CHILL N/A		HEAT INDEX 84F/29C		WIND CHILL N/A		HEAT INDEX N/A		WIND CHILL N/A		HEAT INDEX N/A		WIND CHILL N/A		HEAT INDEX N/A		WIND CHILL N/A		HEAT INDEX 81F/27C	
	15G25 KTS		25G35 KTS		25G45 KTS		11 KTS		17 KTS		16G20 KTS		6 KTS		10G18 KTS		10G22 KTS		14G21 KTS	
	4 MI / 400FT		4 MI / 1000FT		<1 MI / 300FT		7 MI / NO CIG		7 MI / NO CIG		7 MI / NO CIG		7 MI / NO CIG		7 MI / NO CIG		5 MI / NO CIG		5 MI / 2000FT	
	MIST		RAIN (.10")		THUNDERSTORMS (.50")		CLEAR		MOSTLY CLEAR		MOSTLY CLEAR		MOSTLY CLEAR		MOSTLY CLEAR		MIST		THUNDERSTORMS (.20")	
	MAX DA: +2820FT		MAX PA: +1222FT		MAX DA: +3017FT		MAX PA: +1222FT		MAX DA: +2255FT		MAX PA: +1203FT		MAX DA: +3001FT		MAX PA: +1166FT		MAX DA: +2872FT		MAX PA: +1138FT	
	BMNT : 0631		EENT : 2041		BMNT : 0630		EENT : 2042		BMNT : 0628		EENT : 2042		BMNT : 0627		EENT : 2043		BMNT : 0626		EENT : 2044	
	SR : 0725		SS : 1948		SR : 0723		SS : 1949		SR : 0722		SS : 1949		SR : 0721		SS : 1950		SR : 0720		SS : 1951	
	MR : 0758		MS : 2040		MR : 0839		MS : 2146		MR : 0923		MS : 2253		MR : 1011		MS : 2359		MR : 1101		MS : **	
DARK PERIOD 6:31 / 3:20		MOON PERIOD 0:00		DARK PERIOD 6:30 / 0:18 / 2:15		MOON PERIOD 0:45		DARK PERIOD 6:28 / 0:18 / 1:07		MOON PERIOD 1:53		DARK PERIOD 6:27 / 0:17 / 0:01		MOON PERIOD 2:59		DARK PERIOD 6:26 / 0:16		MOON PERIOD 3:00		
ILLUM DATA																				
HELO																				
UAS																				
PERSONNEL																				
VEHICLES																				
VIS SYSTEMS																				
IR SENSORS																				
TIME																				
00 06 12 18 00 06 12 18 00 06 12 18 00 06 12 18 00 06 12 18 00																				
W – Wind TU – Turbulence C – Ceiling P – Precipitation V – Visibility RH – Rel. Humidity																				

FORECASTER : 3 WS

W - Wind TU - Turbulence C - Ceiling P - Precipitation V - Visibility RH - Rel. Humidity

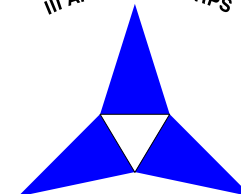
FOR PLANNING ONLY

Integrity - Service - Excellence



5-Day Forecast Impacts

III ARMORED CORPS



PHANTOM

OPERATION	FOR PLANNING ONLY		
	FAVORABLE (No Degradation)	MARGINAL (Some Degradation)	UNFAVORABLE (Significant Degradation)
HELO	CIG >= 1000 FT	CIG 500 - 999 FT	CIG < 500 FT
	VIS >= 4800 METERS	VIS 0800 - 4799 METERS	VIS < 0800 METERS
	WIND < 35 KTS	WIND 35 - 44 KTS	WIND >= 45 KTS
			LGT OR MDT OR SVR TSTM
			LGT OR MDT OR HVY FZ PRECIP
		MDT TURB	SVR TURB
		LGT OR MDT ICING	SVR ICING
UAS	CIG >= 5000 FT	CIG 3000 - 4900 FT	CIG < 3000 FT
	VIS >= 8000 METERS	VIS 4800 - 6000 METERS	VIS < 4800 METERS
	WIND < 25 KTS		WIND >= 25 KTS
		LGT OR MDT PRECIP	HVY PRECIP
			LGT OR MDT OR SVR TSTM
			LGT OR MDT OR HVY FZ PRECIP
		LGT TURBC	MDT OR SVR TURBC
PERSONNEL	TEMP 33 - 84 F	TEMP < 33 F	TEMP <= -25 F
		TEMP >= 85 F	TEMP >= 95 F
	LGT PRECIP	MDT PRECIP	HVY PRECIP
			LGT OR MDT OR SVR TSTM
VEHICLES	LGT PRECIP	MDT PRECIP	HEAVY PRECIP
		LGT FZ PRECIP	MDT OR HVY FZ PRECIP
	TEMP 01 - 104 F	TEMP < 1 F	
		TEMP > 104 F	
VIS SYSTEMS	VIS >= 3200 METERS	VIS 1000 - 3199 METERS	VIS < 1000 METERS
	LGT PRECIP	MDT PRECIP	HVY PRECIP
	TEMP < 100 F	TEMP >= 100 F	
	REL HUMIDITY < 80%	TEMP < -25 F	
IR SENSORS		REL HUMIDITY >= 80%	
	VIS >= 3200 METERS	VIS < 3200 METERS	
	LGT PRECIP	MDT PRECIP	HVY PRECIP
	TEMP 20 - 125 F		TEMP > 125 F
	REL HUMIDITY < 80%		TEMP < -25 F
			REL HUMIDITY >= 80%



FHK115-1





SUMMARY



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



A black helicopter is shown from a low angle, parked on a flat, snow-covered surface. The helicopter's main rotor blades are visible, extending across the top of the frame. The background is a vast, white, snowy landscape under a pale sky. Overlaid on the image is large, 3D, orange-to-yellow gradient text that reads "THE END" in a bold, sans-serif font. Below this, in a similar but smaller 3D font, is the text "Any question or comments?". The entire image is framed by a thick orange border.

THE END
Any question or comments?

