

Det 3, 18th Weather Squadron

TEMPESTA PRAECURSIO

Semi-Annual Weather Brief Winter/Spring 2018



U.S. AIR FORCE





OVERVIEW



Weather Support
Weather Webpage
Seasonal Averages
Seasonal Weather
Operational Impacts



OPERATIONS



Weather Station Operating Hours

Hunter AAF: 24hrs Mon-Fri

Wright AAF: Mon-Fri (0600L-2300L) can flex down to single shift 0600L-1600L for low manning
(Closed weekends, holidays)

Standby and Severe Weather Team (SWAT) for Inclement weather when closed for both locations

For after hours briefing support please contact
26th OWS Flight Weather Briefing cell at:

DSN: 331-2651/2652/2653

Comm: 318-529-2651/2652/2653



WEATHER HOMEPAGE



<https://sps13.stewart.army.mil/USAF/SWO/DEFAULT.ASPX>

Staff Weather Officer Fort Stewart/HAAF SharePoint Services

Home

Operations and Intelligence Weather Input

Type	Name	Modified By
	OI Weather Input 17 NOV 2017	<input type="checkbox"/> Keller, Seth J A1C

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Exercise Support

Type	Name	Modified By
There are no items to show in this view of the "Exercise Support" document library. To add a new item, click "Add document".		

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MEF

Type	Name	Modified By
	17 NOV UAS MEF	<input type="checkbox"/> Ahern, James B TSgt MIL
	17 NOV 17 06Z MEF	<input type="checkbox"/> Moore, Jeremy B TSgt MIL

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5 Day Forecast

Type	Name	Modified By
	17 NOV 17 5-DAY KSVN	<input type="checkbox"/> Keller, Seth J A1C



Planning Products



UNCLASSIFIED

HUNTER AAF / FT STEWART - 5 DAY FORECAST

AS OF 0600 HRS LOCAL Wednesday, November 15, 2017

	Wed 15 Nov 17		Thu 16 Nov 17		Fri 17 Nov 17		Sat 18 Nov 17		Sun 19 Nov 17	
	06L-12L	12L-00L	00L-12L	12L-00L	00L-12L	12L-00L	00L-12L	12L-00L	00L-12L	12L-00L
WINDS	NE 10KTS	NE 10G15KTS	N 05KTS	NW 10G15KTS	NE 05KTS	E 10G15KTS	SE 05KTS	SW 12G20KTS	NW 15G25KTS	NW 12G20KTS
MIN CEILINGS	2000 FT	NO CIG	NO CIG	NO CIG	NO CIG	NO CIG	2500 FT	2500 FT	2000 FT	NO CIG
MIN VISIBILITY	7 MILES	7 MILES	7 MILES	7 MILES	7 MILES	7 MILES	2 MILES	7 MILES	7 MILES	7 MILES
PRESENT WEATHER	MOSTLY CLOUDY	PARTLY CLOUDY	FEW CLOUDS	FEW CLOUDS	CLEAR	FEW CLOUDS	FOG	MOSTLY CLOUDY	ISOLD SHOWERS	FEW CLOUDS
TEMPERATURE	LO: 43F/06C	HI: 64F/18C	LO: 48F/09C	HI: 70F/21C	LO: 54F/12C	HI: 66F/19C	LO: 57F/14C	HI: 73F/23C	LO: 59F/15C	HI: 64F/18C
WIND CHL/HT INDEX										
ROTARY							V	W	W	W
FIXED WING	C						C/V	C	W/C	
GROUND OPS							V	W	W	W
UAV	C						C/V	C	C	
	SR: 0653	SS: 1725	SR: 0654	SS: 1724	SR: 0655	SS: 1724	SR: 0656	SS: 1723	SR: 0657	SS: 1723
LIGHT DATA	BMNT: 0558	EENT: 1820	BMNT: 0559	EENT: 1819	BMNT: 0600	EENT: 1819	BMNT: 0600	EENT: 1819	BMNT: 0601	EENT: 1818
	MR: 0407	MS: 1606	MR: 0503	MS: 1641	MR: 0558	MS: 1716	MR: 0653	MS: 1754	MR: 0747	MS: 1834
	ILLUM: 10.4%		ILLUM: 5.1%		ILLUM: 1.7%		ILLUM: 0.3%		ILLUM: 0.7%	

C-CEILING V-VISIBILITY W-WIND



Mission Execution Forecast



MISSION EXECUTION FORECAST - HUNTER AAF / FORT STEWART														
MCP IS FOR LOCAL FLIGHTS ONLY - HUNTER AAF, WRIGHT AAF, TEST FLIGHT AREAS A/B/C AND FORT STEWART RANGES														
PART I - BRIEF RECORD / TAKEOFF DATA / DAILY SUMMARY														
1. DATE:	2. REF ISSUE:	3. AFD:	4. AFD ID:	5. TAKEOFF WEATHER:										
140423	1300Z		0100Z	CIG:	VIS:	HAZ:								
6. WEATHER ADVISORIES / WATC FCS / WARNINGS:														
7. WINDS:						8. SURFACE DATA (WIND / TEMP / PRES / RH):								
ADVIS #04-012:	CIG / VIS < 1,000FT / 3SM	@ KLHW	VT: 1211Z TO UFN	1300Z	270 06	+18 °C	29.87	+88 FT						
ADVIS #04-014:	CIG / VIS < 1,000FT / 3SM	@ KSVN	VT: 1054Z TO UFN	1500Z	310 07	+22 °C	29.92	+41 FT						
			VT: TO	1700Z	330 09	+25 °C	29.90	+61 FT						
			VT: TO	1800Z	330 10 15	+25 °C	29.87	+88 FT						
			VT: TO	2100Z	330 10 15	+27 °C	29.85	+107 FT						
			VT: TO	2300Z	360 07	+26 °C	29.87	+88 FT						
			VT: TO	0100Z	VRB 06	+25 °C	29.87	+88 FT						
PART II - ENROUTE & MISSION DATA														
9. FLIGHT LEVEL (WIND / TEMP):				10. FLIGHT LEVEL WEATHER / MINIMUMS:				11. SPACE WX / SOLAR / LUNAR DATA:						
FL005:	300 10 +15 °C	CLOUDS @ FLT LEVEL: YES (40%) IN & OUT (1-40%) NO (0%)						HF: GOOD						
FL010:	300 10 +15 °C	OBSCURATIONS @ FLT LEVEL: YES (40%) NO (0%)						LHF: GOOD						
FL020:	310 15 +14 °C	MIN VISIBILITY @ FLT LEVEL: DUE TO:						GPS: GOOD						
FL030:	310 15 +14 °C	CEILING / TOPS / FREEZING LEVEL:						VALID TIME(S): N/A						
FL040:	310 15 +13 °C	FRZ LVL:	13,000 FT	LOCATION:	LFA		LOCATION: N/A							
FL050:	310 15 +12 °C							SOLAR / LUNAR DATA (ALL TIMES LOCAL):						
FL060:	310 15 +11 °C	MIN CIG:	400 FT	LOCATION:	LFA		BMNT: 0551 MR: 0256							
FL100:	300 20 +05 °C							SR: 0647 MS: 1426						
FL150:	300 25 -04 °C							SS: 1959 ILLUM						
FL200:	310 35 -15 °C	MAX TOPS:	18,000 FT	LOCATION:	LFA		EENT: 2055 (0000): 40.6% (2350): 29.6%							
FL250:	320 45 -27 °C													
12. THUNDERSTORMS:			13. TURBULENCE (CAT II AIRFRAME):			14. Icing:			15. PRECIPITATION:					
VALID TIME: N/A			VALID TIME: N/A			VALID TIME: N/A			VALID TIME: FCST					
X NONE	AREA	LINE	X NONE	IN CLEAR	IN CLOUD	X NONE	RIME	MIXED	CLEAR	X NONE	RAIN	DRIZZLE	SNOW	PELLET
ISOLATED (1-2%)			LIGHT			TRACE				LIGHT				
FEW (3-10%)			MODERATE			LIGHT				MODERATE				
SCATTERED (15-40%)			SEVERE			MODERATE				HEAVY				
NUMEROUS (40-70%)			EXTREME			SEVERE				SHOWERS				
LEVELS			LEVELS			LEVELS			LEVELS			LEVELS		
LOCATION: N/A			LOCATION: N/A			LOCATION: N/A			LOCATION: N/A			LOCATION: N/A		
PART III - TEXT AREA FORECAST														
16. FCST AREA:		17. VALID TIME (Z):		18. 50C WIND (KTS):		19. VIS (SM) / RWY:		20. CLOUD LAYERS:		21. MIN ALTY:				
HUNTER AAF & TEST FLIGHT AREAS		12-14 TEMPO 12-14 14-01		27006 33010G15		7 7		OVC004 SCT004 SCT010 SCT035		29.87 29.85				
A B C														
WRIGHT AAF & FT. STEWART RANGES		12-14 TEMPO 12-14 14-01		27006 33010G15		6 / BR 7 / NSW		OVC005 SCT005 SCT010 SCT035		29.86 29.85				
R3005A-E														
PART IV - PLANNING MAX / MINS / REMARKS														
22. MAX / MIN TEMP:		23. MAX PA:		24. MAX SA:		25. LOWEST ALT:		26. COMM / RADIO PHONE NUMBERS (CWCL):						
+27 °C / +18 °C		+107 FT		+1754 FT		29.85		KSVN FCSIR: 315-5471301 / KLHW FCSIR: 433-2147		KSVN ATIS: 323.125 DWP / KLHW ATIS: 118.475 DWP				
27. REMARKS: CONTACT THE SWO VIA PHONE / PMSV / MARINE RADIO FOR WX UPDATES / MCP AMENDABLE FOR WW / WA														
PART V - BRIEFING RECORD														
INITIAL BRIEF MAY NOT BE DONE MA PMSV - IF BRIEFED MORE THAN 90 MIN PRIOR TO TAKE OFF THEN UPDATE WX BEFORE DEPARTURE														
27. BRIEF TIME(Z)	28. VOID TIME:	29. INITIALS:	30. RESERV / IP:	31. VOID TIME:	32. INITIALS:	33. NAME / FAIR / EMAIL ADDRESS OF RECIPIENT(S):								



Mission Execution Forecast



EXTENDED MISSION EXECUTION FORECAST							
PART VI - EXTENDED AREA HAZARDS FORECAST							
3A. THUNDERSTORMS		3B. TURBULENCE (CAT I AND II)		3C. Icing		3D. PRECIPITATION	
VALID TIME:	11/13-12/01	VALID TIME:	11/13-12/01	VALID TIME:	11/13-12/01	VALID TIME:	FCST
MONS	<input checked="" type="checkbox"/>	AREA		MONS		MONS	
WOLATED (1-2%)		MT280	LIGHT	TRACE		LIGHT	
FEW (1-10%)		MT280	MODERATE	LIGHT	<input checked="" type="checkbox"/>	MODERATE	
SCATTERED (10-30%)			SEVERE	MODERATE	<input checked="" type="checkbox"/>	SEVERE	
NUMEROUS (30-60%)			EXTREME	SEVERE		EXTREME	
ALL WEATHER TURBULENCE & Icing NOT FORECASTED		LEVELS		LEVELS		LEVELS	
		N/A		160-270			
LOCATION		LOCATION		LOCATION		LOCATION	
ALL SECTORS		N/A		ALL SECTORS		ALL SECTORS	
PART VII - EXTENDED TEXT AREA FORECAST							
SECT AREA	IN VALID TIME (LT)	MSFC WINDKTS	CLDWS (BR) TWS	CLD LAYERS	ALMSR ALT		
NORTH SECTOR	13-23	24006	7		29.85		
	TEMPO 19-23	VRB10G20	4/TSRA	BKN006			
	23-01	29006	7	BKN040CB SCT070	29.83		
WEST/CENTRAL SECTOR	13-24	23006	7	FEW050 SCT010 SCT150	29.86		
	TEMPO 18-21	3002030	3/TSRA	BKN020CB			
	00-01	01006	7	BKN100	29.83		
SOUTH SECTOR	13-18	2306	7	BKN035	29.88		
	18-01	25009	7	BKN035	29.80		
	TEMPO 19-22		3/TSRA	OVC025CB			



UAS Mission Execution Forecast



FT STEWART/WRIGHT AAF/EVANS AAF MISSION EXECUTION FORECAST (MEF)

FOR UPDATE/DEBRIEF CALL WAAF WX @ DSN 475-3147 OR COMM 912-435-3147 (VHF 252.025)

AFTER 1600L CONTACT HAAF WX @ DSN 729-5467 OR COMM 912-314-5467

DATE 17-Nov-17

VT A (12Z - 04Z)

BRIEF TIME:

VOID TIME:

BRIEFER INITIALS:

PILOT INITIALS:

AMD

SECTION I. WRIGHT AAF TAKE-OFF / RECOVERY WEATHER

VALID TIMES	WIND (KT) (M)	XWIND	VIS (SM)	WX	SKY CONDITION	TEMP	DPT	RH%	ALSTG	PA	DA	MIN CEILING
0700L / 1200Z	03006	05	7	NSW	SKC	+05° C	+04° C	93%	30.12 INS	-138	-1265	12Z - 18Z
0900L / 1400Z	06010	00	7	NSW	SKC	+10° C	+05° C	71%	30.14 INS	-157	-635	N/A
1100L / 1600Z	09010G15	07	7	NSW	SKC	+16° C	+07° C	55%	30.15 INS	-166	+136	18Z - 04Z
1300L / 1800Z	09010G15	07	7	NSW	SKC	+21° C	+07° C	40%	30.14 INS	-157	+798	N/A
1500L / 2000Z	09010G15	07	7	NSW	SKC	+19° C	+07° C	46%	30.12 INS	-184	+503	MAX TOPS
1700L / 2200Z	09010G15	07	7	NSW	SKC	+17° C	+09° C	59%	30.12 INS	-184	+247	12Z - 18Z
1900L / 2400Z	09010G15	07	7	NSW	FEW015	+13° C	+10° C	82%	30.10 INS	-166	-249	N/A
2100L / 0200Z	06005	00	7	NSW	SCT015	+12° C	+11° C	94%	30.10 INS	-166	-378	18Z - 04Z
2300L / 0400Z	06005	00	4	BR	SCT015	+12° C	+11° C	94%	30.10 INS	-166	-378	N/A

SECTION II. CURRENT WATCHES / WARNINGS / ADVISORIES all w/in 5nm or 25nm (ALL TIMES ZULU)

NONE	Valid		to		NONE	Valid		to	
NONE	Valid		to		NONE	Valid		to	
NONE	Valid		to		NONE	Valid		to	



UAS Mission Execution Forecast



SECTION III. ENROUTE WEATHER / HAZARDS (ALL TIMES ZULU / ALL HAZARDS ARE FOR CAT II AIRCRAFT)

*T-STORMS		VT: NA		TURB		VT: NA		ICING		VT: N/A		PRECIP		VT: NA	
<input type="checkbox"/> ISOLD 1-2%	<input type="checkbox"/> SCT 16-45%	<input type="checkbox"/> FEW 3-15%	<input type="checkbox"/> NMRS >45%	<input type="checkbox"/> LGT	<input type="checkbox"/> SVR	<input type="checkbox"/> MDT	<input type="checkbox"/> EXTRM	<input type="checkbox"/> LGT	<input type="checkbox"/> RIME	<input type="checkbox"/> LGT	<input type="checkbox"/> MXD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> AREA	<input type="checkbox"/> LINE	<input type="checkbox"/> IN CLEAR		<u>LEVELS</u>		<input type="checkbox"/> IN CLOUD		<u>LEVELS</u>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MAX TOPS:												DRIZ		SHWRS	
												RAIN		FRZNG	
												SNOW			
												SLEET			

*HAIL, SEVERE TURBULENCE & ICING, HEAVY PRECIPITATION, LIGHTNING & WIND SHEAR EXPECTED IN AND NEAR THUNDERSTORMS.

MIN FREEZING LVL (MSL)

12Z-18Z

120

18Z-04Z

120

SPACE WEATHER IMPACTS

12Z-04Z

HF NO IMPACT

UHF NO IMPACT

GPS NO IMPACT

SOLAR AND LUNAR DATA

BMNT 0601 L

SUNRISE 0657 L

SUNSET 1726 L

EENT 1821 L

MOONRISE 0600 L

MOONSET 1718 L

ILLUM % 1.7%

SECTION IV. FLIGHT LEVEL WINDS

VALID TIME: 1200Z-1600Z				VALID TIME 1600Z-2200Z				VALID TIME 2200Z-0400Z			
LEVEL	DIR	KTS	TEMP	LEVEL	DIR	KTS	TEMP	LEVEL	DIR	KTS	TEMP
FL010	60	20	+13C	FL010	100	15	+15C	FL010	100	15	+13C
FL020	60	20	+12C	FL020	100	15	+13C	FL020	100	15	+12C
FL030	80	20	+10C	FL030	100	10	+09C	FL030	120	10	+09C
FL040	80	20	+10C	FL040	100	10	+08C	FL040	120	10	+09C
FL050	60	5	+11C	FL050	100	10	+09C	FL050	120	10	+09C
FL060	340	5	+10C	FL060	90	5	+08C	FL060	130	5	+09C
FL080	330	10	+08C	FL080	210	5	+07C	FL080	220	5	+07C
FL100	300	15	+04C	FL100	240	15	+04C	FL100	250	10	+04C
FL120	280	20	00C	FL120	250	15	00C	FL120	260	15	+01C
FL140	290	20	-04C	FL140	270	20	-03C	FL140	270	20	-03C
FL160	300	25	-08C	FL160	270	20	-08C	FL160	280	25	-08C
FL180	300	30	-14C	FL180	280	25	-14C	FL180	300	25	-13C
FL220	300	35	-22C	FL220	300	30	-19C	FL220	310	30	-18C
FL240	300	35	-27C	FL240	310	40	-25C	FL240	320	40	-24C
FL270	310	40	-35C	FL270	320	50	-32C	FL270	320	50	-31C

REMARKS:



UAS Mission Execution Forecast



SECTION V. AREA FORECAST

Forecast Area	Valid Time (Z)	SFC Wind (KTS)	VIS (SM) / WX	CLOUD LAYERS	MIN ALSTG
R3005 A/B	12-16	06010	7	SKC	3012
	16-24	09010G15	7	SKC	3010
	00-03	06005	7	FEW015	3010
	03-04	06005	4 BR	SCT015	3010
R3005 C/D	12-16	06010	7	SKC	3012
	16-24	09010G15	7	SKC	3010
	00-03	06005	7	FEW015	3010
	03-04	06005	4 BR	SCT015	3010
R3005 E	12-16	06010	7	SKC	3012
	16-24	09010G15	7	SKC	3010
	00-03	06005	7	FEW015	3010
	03-04	06005	4 BR	SCT015	3010

*****Briefing not valid until call back for initials from SWO*****

THIS IS A LOCAL PRODUCT PRODUCED FOR UAS OPERATING IN THE FT STEWART RANGES



WEATHER BRIEFINGS



- ✓ Provide Mission Execution Forecasts (MEF) for VFR local flights w/in 150nm ring of KSVN
- ✓ Provide 175-1 briefings via telephone, fax, email or in person
- ✓ 175-1's should be requested at least 2 hours prior to delivery time and prior to filing a flight plan
- ✓ Updates may be done on PMSV, but not initial briefs

***For after hours briefing support please contact
26th OWS Flight Weather Briefing cell at:***

DSN: 331-2651/2652/2653

Comm: 318-529-2651/2652/2653



PMSV



- ✓ Pilot-to-Metro Service
- ✓ UHF Frequency only
- ✓ Available during duty hours only
- ✓ **HAAF - UHF: 309.0**
- ✓ **WAAF - UHF: 252.025**



WEATHER WATCHES, WARNINGS AND ADVISORIES



Weather Advisory - Alerts supported units to weather conditions that could affect their operations.

Weather Watch - Alert supported units of **potential** for hazardous weather for which they must take protective measures.

Weather Warning - Alert supported units to **existing** or **imminent** weather conditions that pose a hazard to life or property.



SEASONAL WEATHER



- ✓ **WINTER:** Frequent cold frontal passages, stronger winds, highest probability for turbulence and icing, minimal T-storm activity, frequent low ceiling and visibility conditions.
- ✓ **SPRING:** Frequent cold frontal passages, stronger winds, decreasing probability for turbulence and icing, increasing thunderstorm activity.



Percentage of Cig blo 030



% Ceiling < 3000 ft

Name: WRIGHT AAF , GA UNITED STATES Network Type: ICAO
 Platform ID: KLHW Lat: 31.869 Lon: -81.562 Time Offset: -5.00
 Data Derived from 14WS Surface Observation Database / POR: 1973 - 2013

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

23Z (18L)	23	23	19	10	10	13	9	14	13	16	18	26
22Z (17L)	26	27	19	13	12	15	13	16	16	16	20	27
21Z (16L)	25	24	19	16	11	14	16	14	17	19	21	24
20Z (15L)	27	24	22	15	14	16	14	15	18	19	22	24
19Z (14L)	29	28	22	14	14	15	12	14	21	23	21	28
18Z (13L)	32	28	23	15	14	13	11	14	22	24	24	31
17Z (12L)	36	28	26	16	18	16	13	21	25	28	26	33
16Z (11L)	36	31	32	21	20	19	16	19	28	29	28	34
15Z (10L)	39	32	32	26	23	22	19	23	30	31	30	39
14Z (09L)	41	35	34	25	27	26	20	26	33	34	30	39
13Z (08L)	38	36	32	27	28	30	22	29	32	35	33	37
12Z (07L)	36	37	30	26	27	27	21	28	28	36	31	37
11Z (06L)	34	30	30	26	30	27	25	27	30	34	30	37
10Z (05L)	34	30	27	27	34	23	27	29	30	35	30	37
09Z (04L)	34	32	30	32	34	28	26	38	26	45	34	29
08Z (03L)	30	30	33	30	37	27	21	31	19	41	31	36
07Z (02L)	27	30	34	29	34	18	19	29	22	41	38	34
06Z (01L)	30	40	35	25	26	14	15	29	18	32	34	34
05Z (00L)	26	32	26	16	20	16	12	22	16	30	29	29
04Z (23L)	24	27	20	14	18	14	14	23	19	30	24	27
03Z (22L)	27	23	20	14	12	15	6	10	13	21	19	28
02Z (21L)	22	22	21	12	10	10	4	8	13	15	16	25
01Z (20L)	22	21	22	10	13	13	7	8	14	13	18	26
00Z (19L)	22	21	21	11	12	13	9	7	14	13	21	26
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



[Click to see ASCII data](#)



Percentage of Vis blo 3SM



% Visibility < 3 SM

Name: WRIGHT AAF , GA UNITED STATES Network Type: ICAO
 Platform ID: KLHW Lat: 31.889 Lon: -81.562 Time Offset: -5.00
 Data Derived from 14WS Surface Observation Database / POR: 1973 - 2013

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

23Z (18L)	6	7	4	4	4	7	9	13	6	3	4	10
22Z (17L)	8	9	5	4	5	10	10	10	5	6	7	11
21Z (16L)	8	5	7	7	5	10	12	10	7	4	5	8
20Z (15L)	7	6	7	5	5	7	13	9	8	3	7	5
19Z (14L)	7	7	6	4	4	6	9	7	5	7	7	7
18Z (13L)	9	7	7	6	5	4	2	5	3	4	5	8
17Z (12L)	11	7	7	6	4	4	3	7	4	5	6	9
16Z (11L)	12	9	8	5	4	3	2	5	6	4	6	13
15Z (10L)	17	14	10	6	4	4	3	3	8	6	10	16
14Z (09L)	23	20	15	7	6	4	4	6	11	13	20	22
13Z (08L)	30	28	24	14	13	9	10	15	23	28	30	29
12Z (07L)	32	30	29	24	30	24	22	32	39	31	32	32
11Z (06L)	38	22	29	26	37	32	31	42	40	31	30	32
10Z (05L)	29	30	20	26	34	31	28	32	29	28	29	38
09Z (04L)	35	27	19	23	29	23	20	22	17	24	27	45
08Z (03L)	34	21	17	25	28	17	11	11	22	17	30	38
07Z (02L)	32	22	16	11	22	7	13	13	19	31	33	37
06Z (01L)	42	19	20	10	16	7	7	13	13	15	22	41
05Z (00L)	40	19	8	4	5	3	3	14	18	9	14	37
04Z (23L)	22	13	5	2	3	2	7	14	12	9	13	27
03Z (22L)	18	7	3	5	2	4	3	3	6	4	9	23
02Z (21L)	14	8	4	2	4	2	4	2	4	4	8	20
01Z (20L)	11	7	5	3	5	6	5	3	4	3	7	10
00Z (19L)	6	6	5	3	5	9	7	7	7	2	5	8
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



[Click to see ASCII data](#)



HAZARDS TO AIRCRAFT

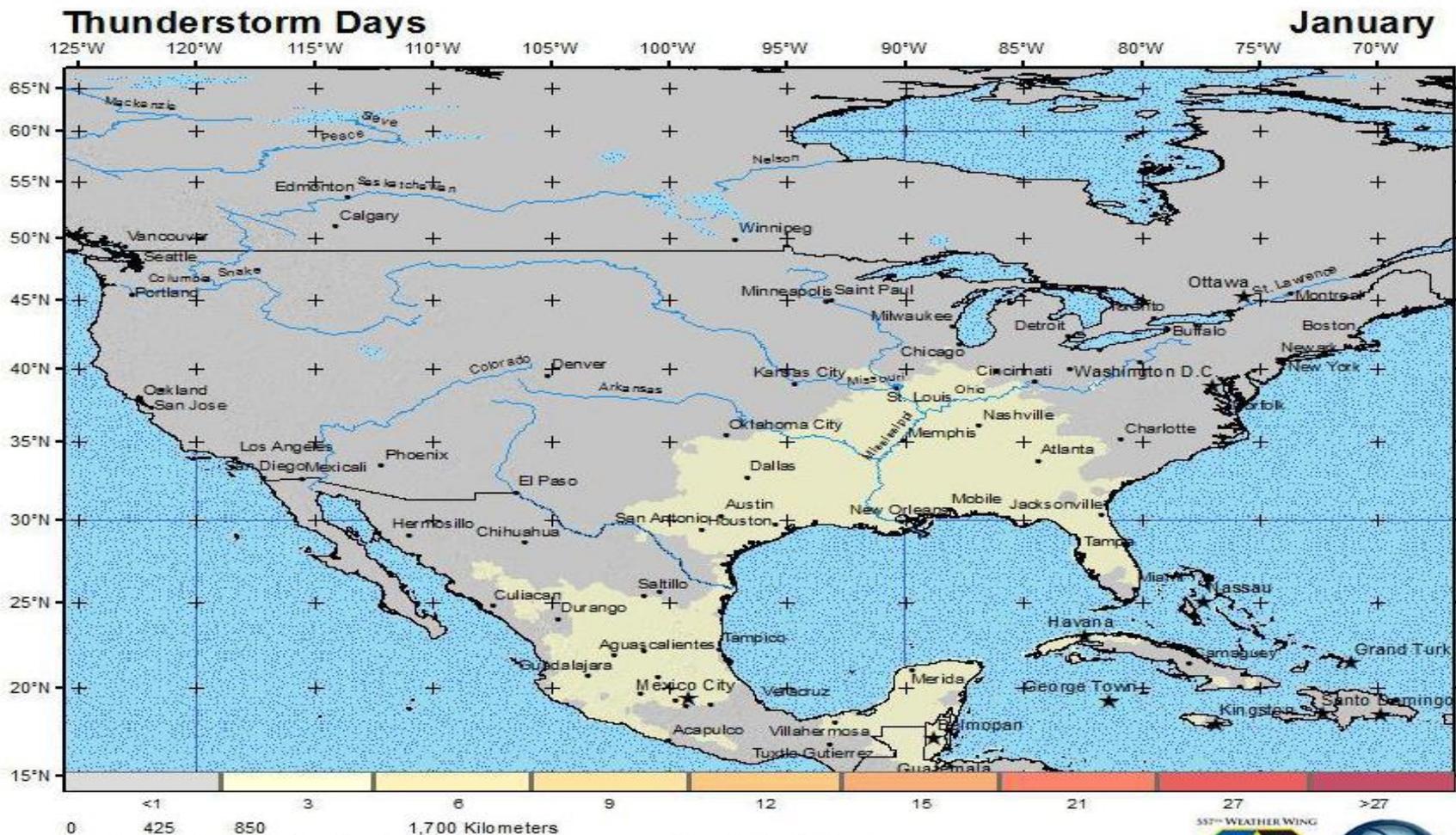


WINTER-SPRING

- ✓ Thunderstorms – seasonal annual low but not completely ruled out
- ✓ Icing – Common in winter months assoc. w/ fog and low ceilings
- ✓ Turbulence
 - ✓ decrease in thermal turbulence (heating)
 - ✓ increase in mechanical turbulence (CF)
- ✓ LLWS - Increased potential for wind shear below 2,000'



Thunderstorms



Map Projection: Cylindrical Equal Area
Source: 14th Weather Sq Spatial Climatology
Classification Intervals: Variable (Upper Limits Shown)

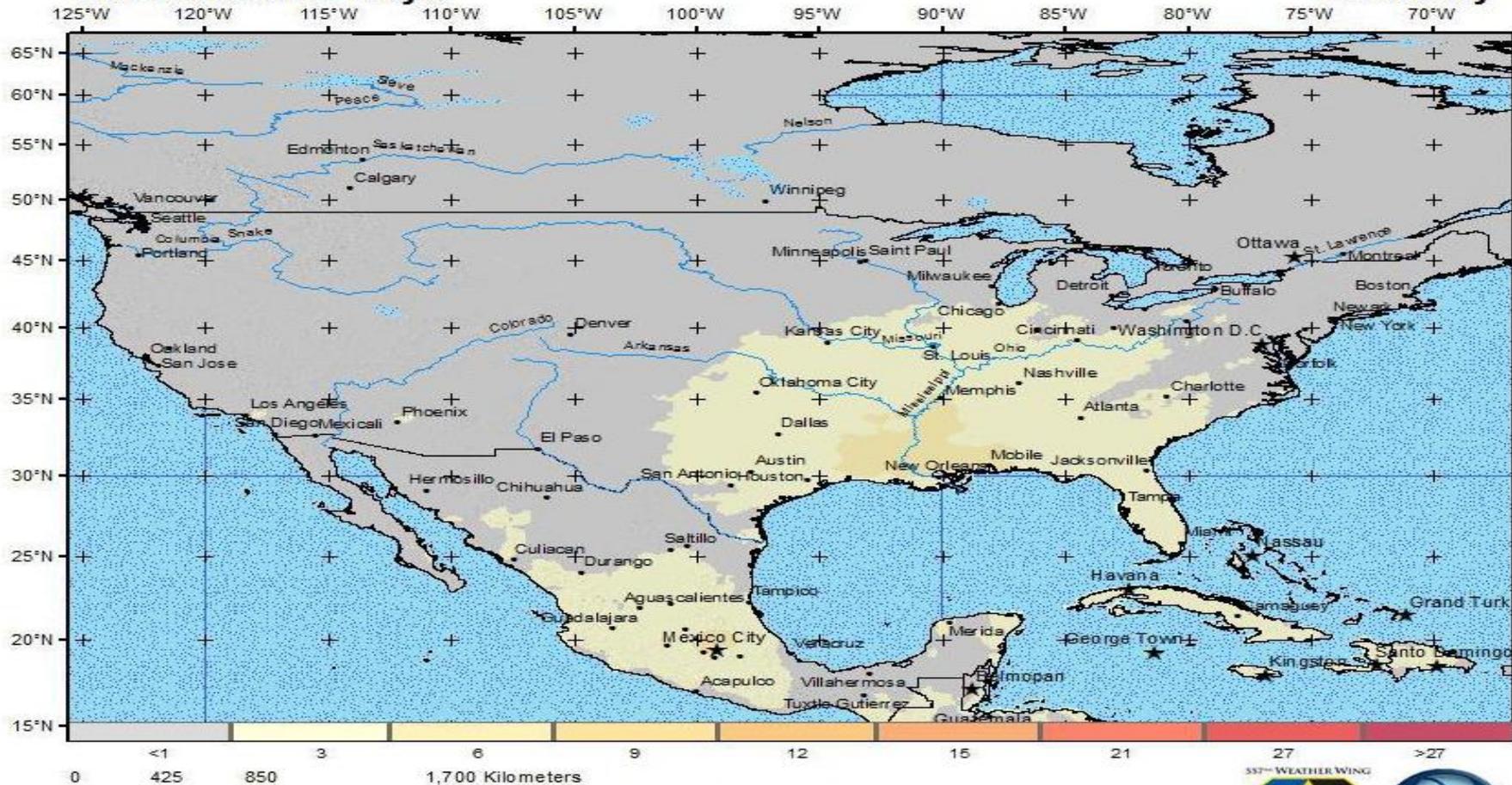
United States
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For Planning Purposes Only
Created On: 07 Nov 2016





Thunderstorm Days

February



Map Projection: Cylindrical Equal Area
 Source: 14th Weather Sq Spatial Climatology
 Classification Intervals: Variable (Upper Limits Shown)

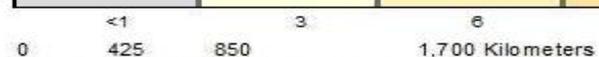
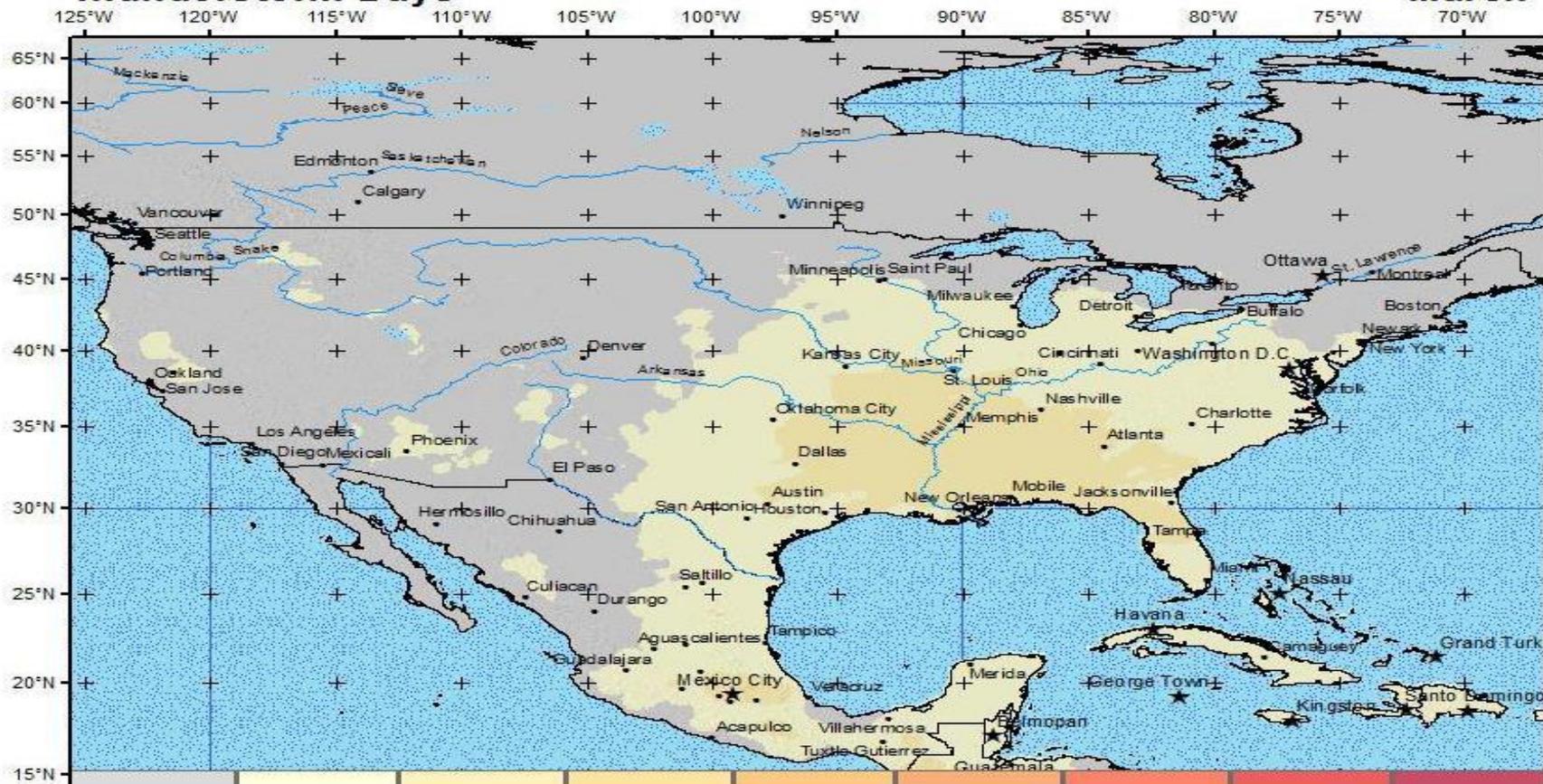
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Thunderstorm Days

March



Map Projection: Cylindrical Equal Area
Source: 14th Weather Sq Spatial Climatology
Classification Intervals: Variable (Upper Limits Shown)

United States

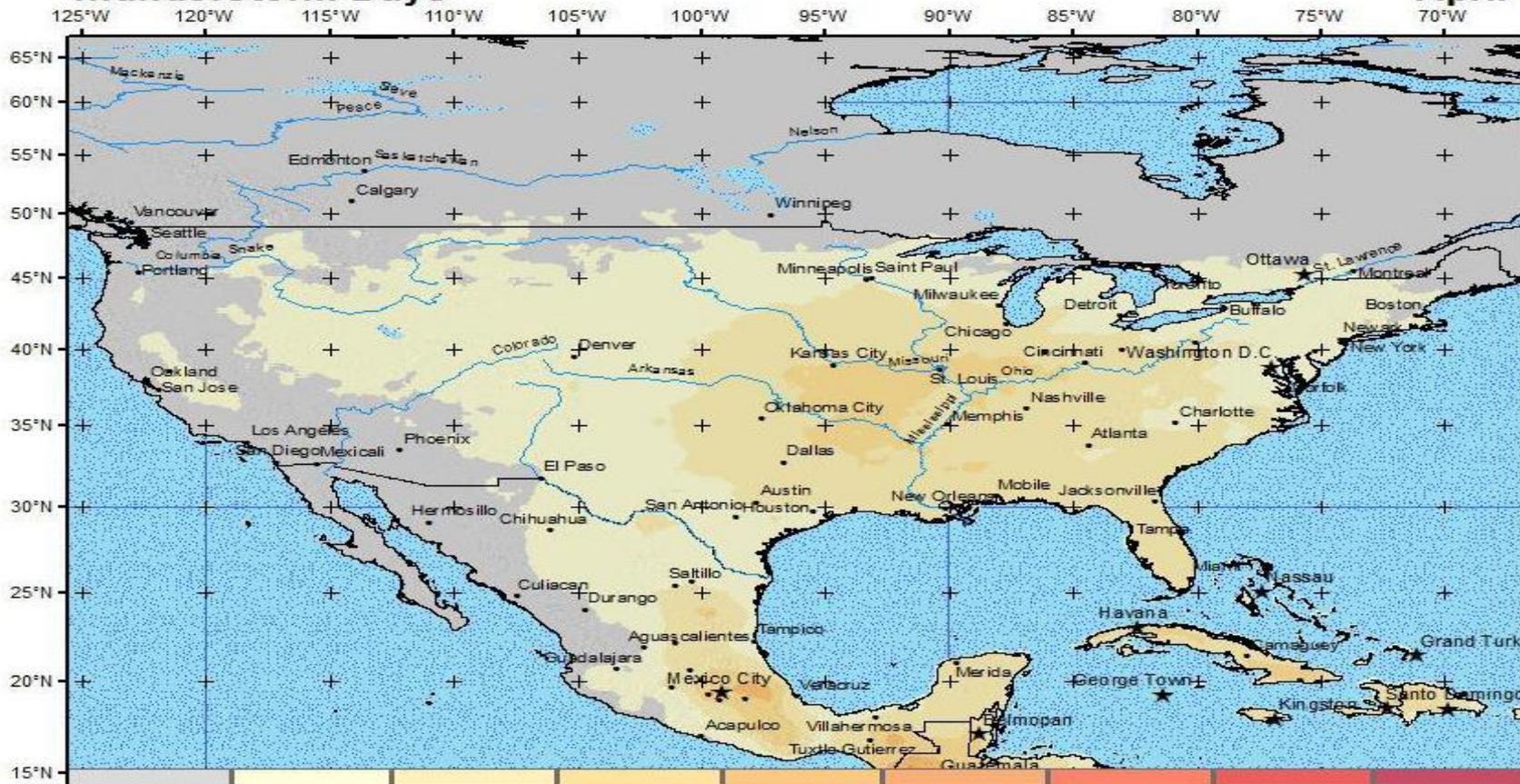
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Thunderstorm Days

April



0 425 850 1,700 Kilometers

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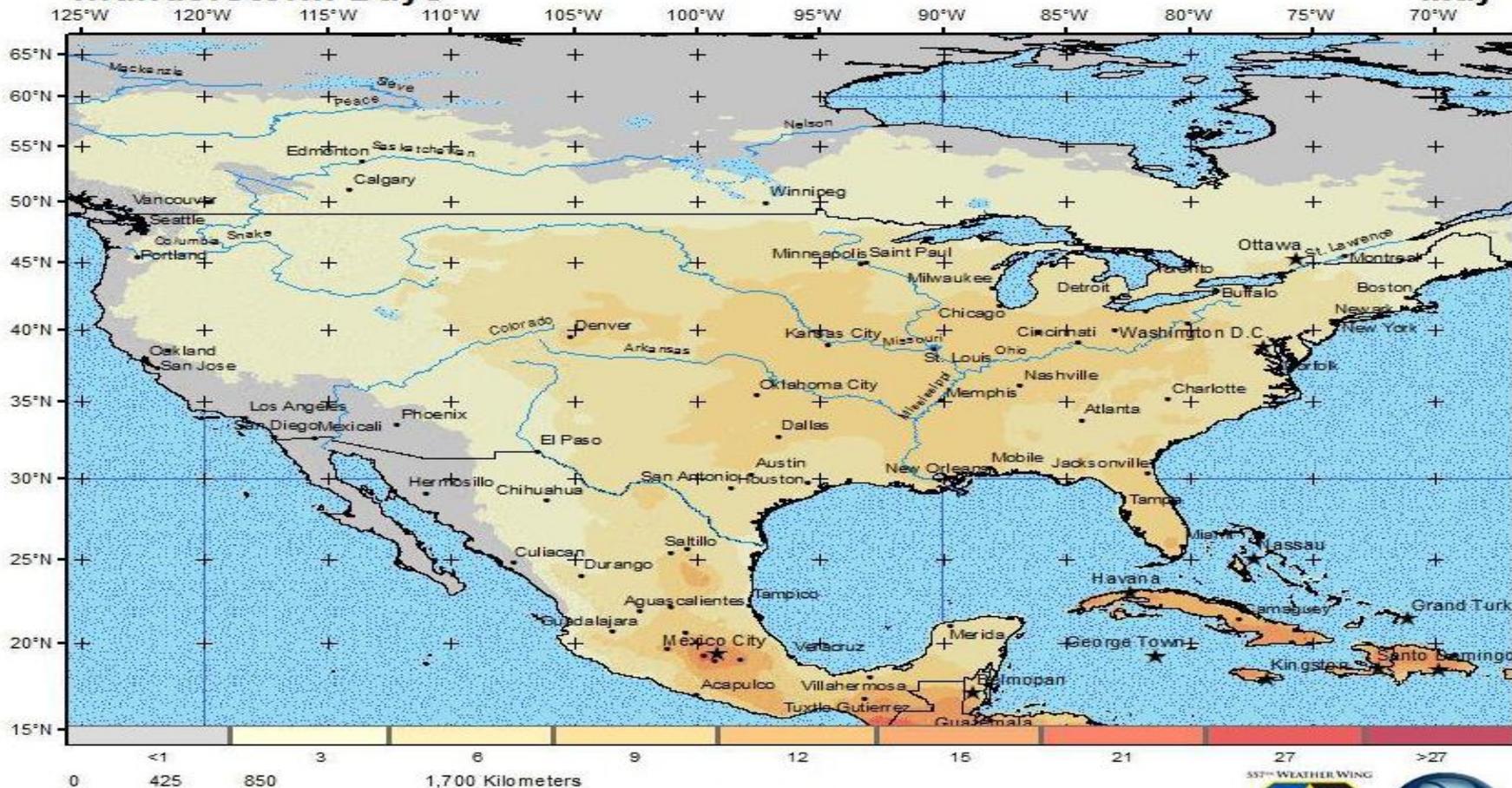
Map Projection: Cylindrical Equal Area
Source: 14th Weather Sq Spatial Climatology
Classification Intervals: Variable (Upper Limits Shown)





Thunderstorm Days

May



Map Projection: Cylindrical Equal Area
Source: 14th Weather Sq Spatial Climatology
Classification Intervals: Variable (Upper Limits Shown)

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ICING



- ✓ Increases the weight of the aircraft
- ✓ Decreases lifting surface efficiency
- ✓ Destroys the efficiency of the airfoil by altering its shape (for wings or propellers)
- ✓ Effects on helicopters potentially more severe than fixed-wing because of relatively slow cruising speeds—aerodynamic effects are greatly exaggerated by icing and altered aerodynamic effects make control unpredictable



ICING TYPES



✓ Rime

-Milky, bumpy coating

-Usually from stable precipitation

✓ Clear

-Clear, smooth coating

-From cumuliform/freezing precipitation

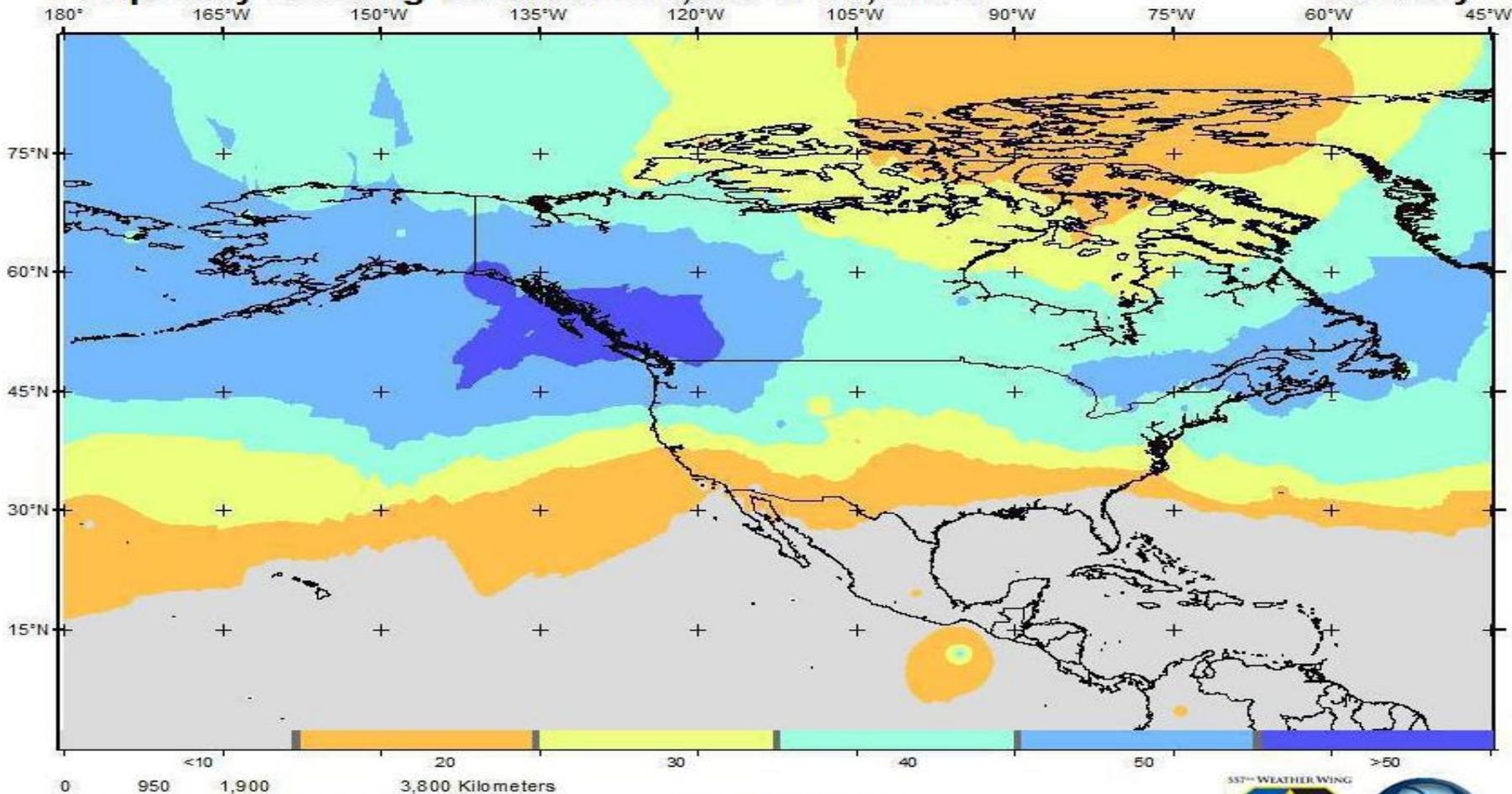
✓ Mixed

-Combination of the above



Frequency for Icing Conditions 6,000 to 10,000Ft

January



North America

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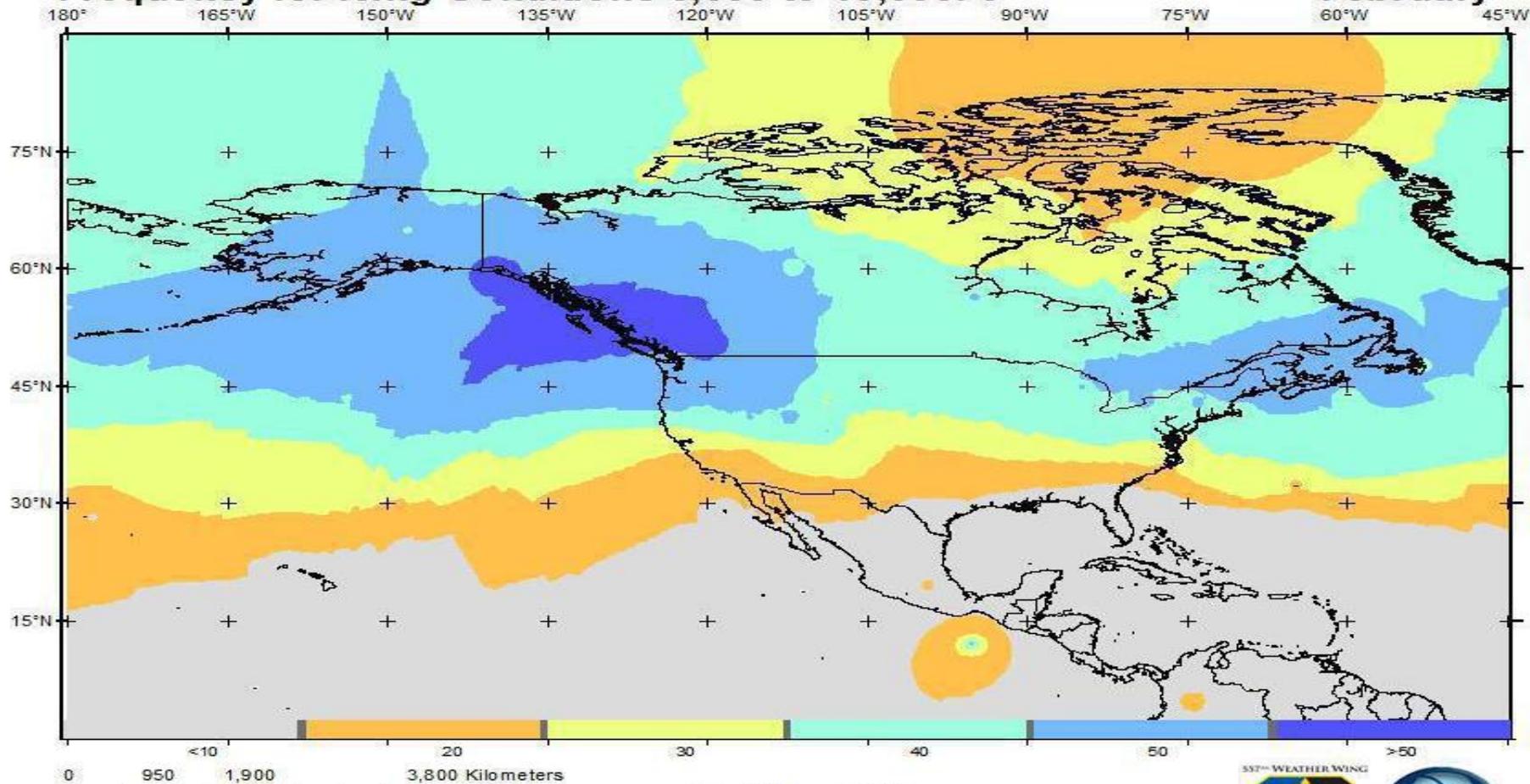
Map Projection: Geographic
Source: 14th Weather Sq Spatial Climatology
Classification Intervals: 10 Percent (Upper Limits Shown)





Frequency for Icing Conditions 6,000 to 10,000Ft

February



Map Projection: Geographic
Source: 14th Weather Sq Spatial Climatology
Classification Intervals: 10 Percent (Upper Limits Shown)

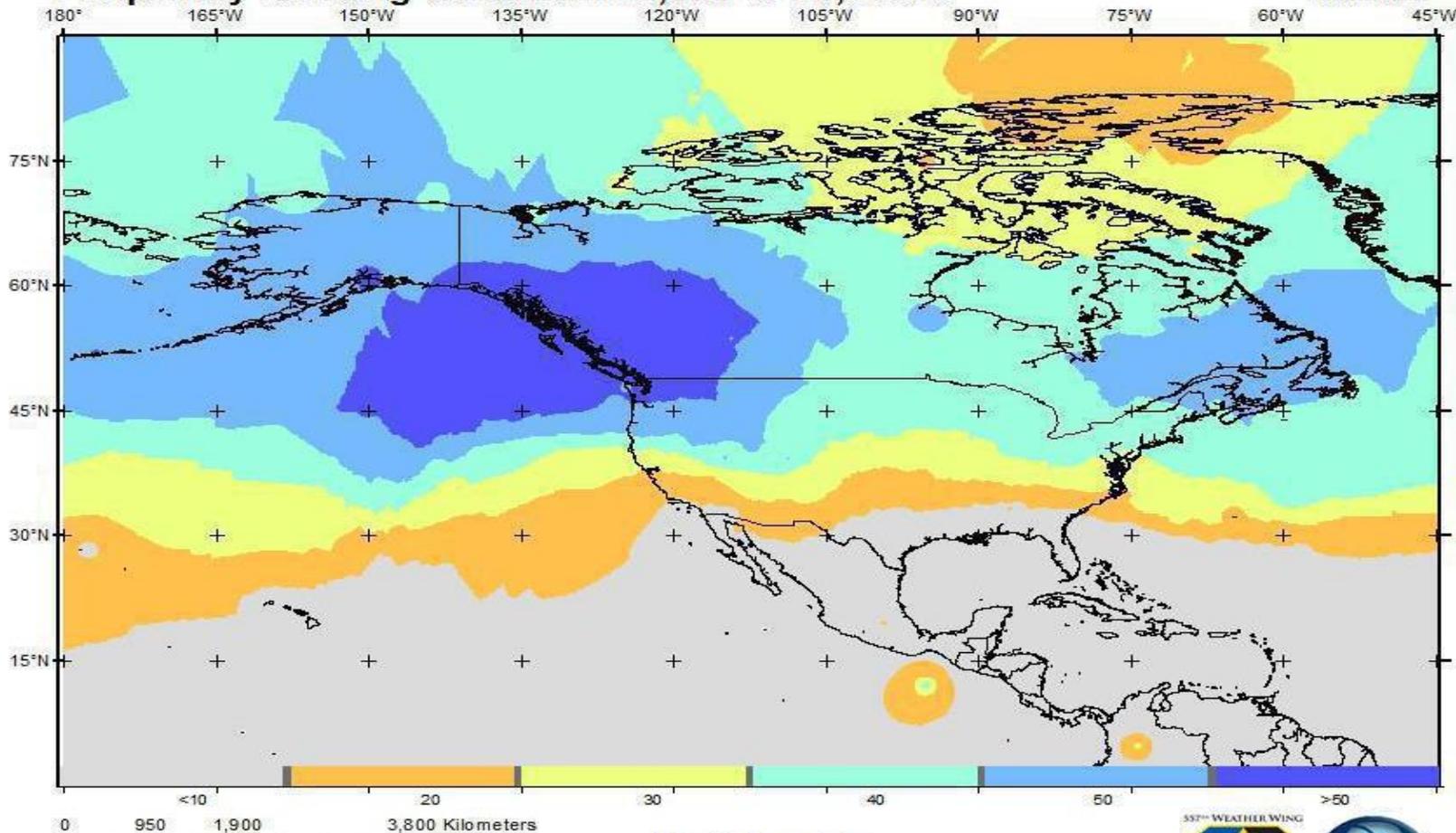
North America
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Created On: 21 May 2015





Frequency for Icing Conditions 6,000 to 10,000Ft

March



Map Projection: Geographic
Source: 14th Weather Sq Spatial Climatology
Classification Intervals: 10 Percent (Upper Limits Shown)

North America
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TURBULENCE



- ✓ Turbulence to aircraft is categorized by: size, weight, and speed of the aircraft.
- ✓ All forecasts (MEF/5 day, etc) are set for **CAT II** aircraft
- ✓ Any hazards on MEF will be re-calculated by $\frac{1}{2}$ for each category difference (example):
 - ✓ CAT II LGT = CAT I LGT OCNL MOD turb
- ✓ All Flight Weather Briefs (Locals, 175-1) will be specific to each aircraft



TURBULENCE



- ✓ Increase in stronger winds from the West and North influence mechanical and frontal TURBC
- ✓ Fast moving frontal systems can produce moderate or greater low-level turbulence
- ✓ Frictional effects normally limited to first 3,000-4,000 feet

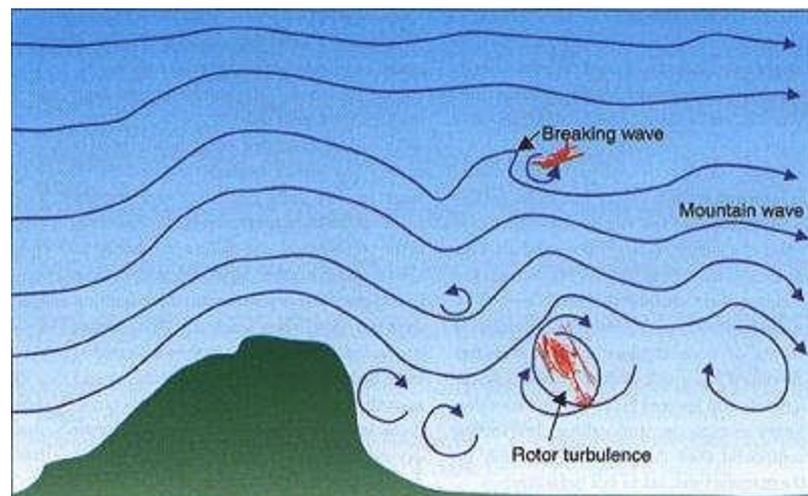


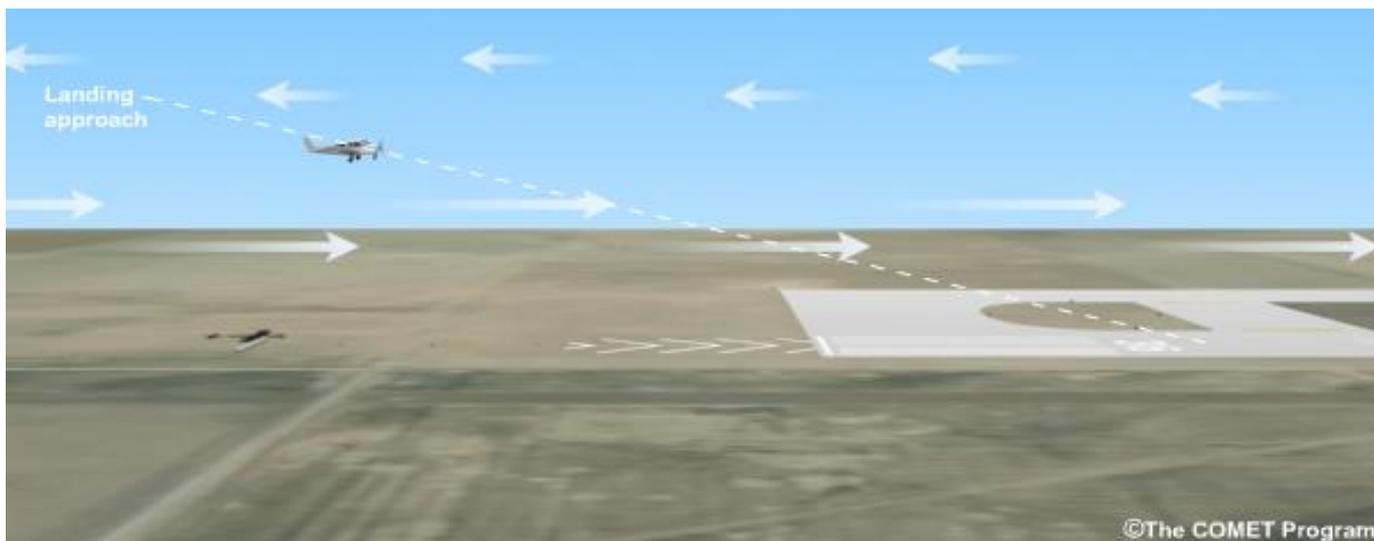
Image courtesy Flight Safety Australia - Jan/Feb 2002



LOW LEVEL WIND SHEAR



- ✓ LLWS can impact aircraft performance during both takeoff and landing.
- ✓ The most hazardous consequence is when it occurs on approach AND near the surface, after the pilot has made power adjustments to compensate for the wind





Any Questions?

“Weather’s not important ‘til it’s important – then it’s too late...” Lt Col Bill Aggrella