## MIDSOUTH FIRE WEATHER ANNUAL OPERATING PLAN 2008

#### I. INTRODUCTION

The National Weather Service, Memphis, Tennessee, will provide fire weather services for state and federal forestry agencies and other public land management institutions in the Midsouth. The services will consist of fire weather products and support as outlined in the Interagency Agreement for Meteorological Services, which was signed by the Departments of Commerce, Agriculture, and Interior. Information in this document is a procedural outline of services to be provided.

The National Weather Service (NWS) will compose standard products including fire weather planning forecasts, fire weather watches, red flag warnings, NFDRS forecasts, fire weather notification messages, spot fire weather forecasts, and fire weather point forecast matrices. The NWS will communicate forecasts and other information to appropriate officials. Weather training and other assistance will be provided to cooperating agencies by the NWS when meteorologists are available.

Agencies served will provide the NWS weather observations suitable for forecasting and verification purposes as needed. Land management agencies will provide fuel and fire behavior training necessary for forecasters to understand critical needs of foresters and others that extinguish forest fires.

#### **II. COOPERATING FORESTRY AGENCIES**

The National Weather Service will cooperate with the following agencies to provide Midsouth fire weather services:

- A. Mississippi Forestry Commission (MFC)
- B. Arkansas Forestry Commission (AFC)
- C. Tennessee Division of Forestry (TDF)
- D. Missouri Department of Conservation (MDC)
- E. National Park Service Natchez Trace Parkway
- F. USDA Forest Service St. Francis Natl. Forest, Holly Springs Natl. Forest, and Tombigbee National Forest

Contact information for these agencies is in Appendix A and B.

#### **III. SERVICE AREA**

The Midsouth fire service area is around Memphis, Tennessee. This area includes portions of Northeast and East-Central Arkansas, the Missouri Bootheel, North Mississippi, and West Tennessee. A list of counties included in the service area is listed in Table 1.

Table 1. Counties Included in the Midsouth Fire Weather Service Area

Arkansas C Clay Lawrence		Crittenden Phillips	Cross Poinsett	Greene Randolph	Lee St. Francis
Missouri Co Dunklin	ounties Pemiscot				
Tennessee (	Counties				
Benton	Carroll	Chester	Crockett	Decatur	Dyer
Fayette	Gibson	Hardeman	Haywood	Henderson	Henry
Lake	Lauderdale	Madison	McNairy	Obion	Shelby
Tipton	Weakley				
Mississippi	Counties				
Alcorn	Benton	Calhoun	Chickasaw	Coahoma	DeSoto
Itawamba	Lafayette	Lee	Marshall	Monroe	Panola
Pontotoc	Prentiss	Quitman	Tallahatchie	Tate	Tippah
Tishomingo	Tunica	Union	Yalobusha		

# IV. OPERATIONAL WEATHER SERVICES TO BE PROVIDED BY THE NATIONAL WEATHER SERVICE

#### A. BASIC SERVICES

#### **1. ROUTINE FIRE WEATHER PLANNING FORECASTS**

Routine fire weather planning forecasts will be issued each morning and afternoon.

a. General features - The NWS product identifier used is MEMFWFMEG for both the morning and afternoon forecast. The forecasts should be segmented into 6 fixed zones. The zones and zone names to be used are:

- 1. Northeast Arkansas and Missouri Bootheel
- 2. East-Central Arkansas and St. Francis National Forest

- 3. Northern West Tennessee
- 4. Southern West Tennessee

5. Northwest Mississippi and Yalobusha Unit of the Holly Springs National Forest

6. Northeast Mississippi...Northern Unit Holly Springs National Forest ...Northern Unit Tombigbee National Forest...Northern Mississippi Portion Natchez Trace Parkway

b. Release time - Fire weather planning forecasts will be issued twice a day. Morning forecasts are to be released by 6:00 am Central Time. Afternoon forecasts are to be released as soon as possible after other public products and at least by 4:00 pm Central Time. Many times the afternoon forecast should be ready by 3:30 pm Central Time. Fire weather forecasts are to be issued throughout the year. Unscheduled updates will be made when determined necessary by the NWS or foresters.

c. Content Examples (See Figure 1 and 2) -

1. Header containing product title, originating office, and time/date.

2. Headline (after the Header and before the Discussion) – (An overview headline is required when Red Flag Warnings and/or Fire Weather Watches are in effect. A headline should be used when low humidity is forecast in accordance with local policy. The headline will include the warning type, location, reason for issuance (e.g., high winds and low humidity), and effective time period (i.e., the same format and information as in the Red Flag Warning). Describe the location in terms of geographic or other easily identified markers such as forests, parks, cities, towns, rivers, or highways. Also, include a headline for a warning and/or watch in each appropriate zone grouping. Forecasters are encouraged to use the same headline format (type, location, reasoning, and time period) in the appropriate individual segments as in the top headline. Significant trends of locally-defined critical weather elements should be headlined. To avoid confusion and possible inconsistencies among products, headlines for other watch/warning events from the public program (i.e., those headlined in the Zone Forecast Product) should not be included in the fire weather planning forecast.)

Low humidity conditions should be headlined when the minimum humidity is <= 30% and watch/warning conditions are not met. Fire Weather Watches and Red Flag Warnings and are defined in section IV.A.5. Separate products are issued for watches/warnings.

3. Discussion - Narrative of Midsouth weather with emphasis on the most important fire weather features of the forecast period.

4. Fire Zone Forecast (1 through 6). (Each parameter represents the whole zone.)

Average cloud cover Precipitation type Chance of precipitation Average max/min air temperature and 24 hour trends (F) Average max/min relative humidity and 24 hour trends (%) Average wind direction and range of wind speed at 20 ft (mph) Average precipitation amounts (inches) **Precipitation duration (hr) Beginning of precipitation (hr) Ending of precipitation (hr)** Mixing height (m and ft) (AGL and MSL) Transport wind direction and speed (m/s and mph) Ventilation index  $(m^2/s)$ **Category day 500 meter mixing height temperature (F)** 500 meter transport wind direction and speed (m/s and mph) **Dispersion index** Lower atmospheric stability index Arkansas stability index **Mississippi stagnation index** 

**Remarks (if necessary)** 

#### Extended forecast containing cloud cover, maximum and minimum air temperature, minimum relative humidity, chance and type of precipitation, wind speed, and wind direction through day 7.

d. Dissemination - Fire weather planning forecasts shall be disseminated via the internet, NWS circuits, and the NOAA Weather Wire Service. Forecasts should be posted on the internet within 15 minutes after release. The fire weather planning forecast can be obtained from <a href="http://www.srh.noaa.gov/meg">http://www.srh.noaa.gov/meg</a>. A backup website to be used to get the fire weather planning forecast is <a href="http://fire.boi.noaa.gov/FIREWX/MEMFWFMEG.html">http://fire.boi.noaa.gov/FIREWX/MEMFWFMEG.html</a>

e. Updates – The NWS will update the MEMFWFMEG when needed as determined by weather conditions and user requests.

f. Examples - An example of a morning forecast is in Figure 1, and an example of an afternoon forecast is in Figure 2.

Figure 1. Example of Morning Fire Weather Planning Forecasts to be Issued. FNUS54 KMEG 071202 FWFMEG FIRE WEATHER PLANNING FORECAST FOR THE MIDSOUTH NATIONAL WEATHER SERVICE MEMPHIS TN 602 AM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN MOST OF THE MIDSOUTH FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

.DISCUSSION...

A DRY COLD FRONT WILL CROSS THE MIDSOUTH TODAY ON ITS WAY TO THE GULF COAST. TOMORROW AND SATURDAY...HUMIDITY WILL DROP INTO THE TEENS AND 20S AND HEIGHTEN FIRE DANGER.

TEMPERATURES AND HUMIDITY LEVELS WILL MODIFY TO MORE TYPICAL LEVELS OVER THE WEEKEND AND LOWER FIRE DANGER POTENTIAL. RAIN WILL KEEP FIRE DANGER LOW MONDAY THROUGH NEXT WEDNESDAY.

ARZ008-009-017-018-026>028-MOZ113-115-080315-CLAY-CRAIGHEAD-DUNKLIN-GREENE-LAWRENCE-MISSISSIPPI-PEMISCOT-POINSETT-RANDOLPH-INCLUDING...MISSOURI BOOTHEEL...NORTHEAST ARKANSAS 602 AM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN NORTHEAST ARKANSAS AND THE MISSOURI BOOTHEEL FRIDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TODAY	TONIGHT	FRI
PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS	34 (-21) 45 (+6) N 11-15 G21 N 12-16 G22	0 16 (-17) 66 (-13)	MCLEAR NONE 0 35 29 LGT/VAR LGT/VAR 0.00
PRECIP ENDS MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-AGL) TRANSPORT WND (M/S) TRANSPORT WND (MPH) VENT INDEX (M2/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH) DISPERSION INDEX LASI STABILITY STAGNATION INDEX	3742 1227 4025 N 15 N 35 17115 5 35 N 14 N 30	42 4 E 3	671 2202 757 2485 NE 6 NE 14 4026 3 22 SW 3 SW 7 38 4 D 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

. SATURDAY...MOSTLY CLEAR. LOWS 15 TO 20. HIGHS IN THE UPPER 40S. MINIMUM RH 31 PERCENT. SOUTH WINDS 5 TO 10 MPH. .SUNDAY...A SLIGHT CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS AROUND 30. HIGHS AROUND 50. MINIMUM RH 59 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A SLIGHT CHANCE OF SHOWERS...THEN A SLIGHT CHANCE OF LIGHT RAIN. MOSTLY CLOUDY. LOWS AROUND 40. HIGHS IN THE MID 50S. MINIMUM RH 65 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .TUESDAY...A CHANCE OF RAIN...THEN A CHANCE OF SHOWERS AND THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE MID 50S. MINIMUM RH 72 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH BECOMING SOUTH IN THE AFTERNOON. .WEDNESDAY...A CHANCE OF THUNDERSTORMS. A CHANCE OF RAIN SHOWERS. MOSTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE LOWER 50S. MINIMUM RH 66 PERCENT. WEST WINDS AROUND 5 MPH.

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ARZ035-036-048-049-058-080315-CRITTENDEN-CROSS-LEE(AR)-PHILLIPS-ST. FRANCIS-INCLUDING...EAST-CENTRAL ARKANSAS...ST. FRANCIS NATIONAL FOREST 602 AM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN EAST-CENTRAL ARKANSAS FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TODAY	TONIGHT	FRI
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS PRECIP ENDS	39 (-17) 44 (+4) NW 9-13 G22 N 12-16 G23	63 (-20)	
MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-MSL) TRANSPORT WND (M/S) TRANSPORT WND (MPH) VENT INDEX (M2/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH) DISPERSION INDEX LASI STABILITY STAGNATION INDEX	3742 1227 4025 N 11 N 25 12551 4 43 N 13 N 29	42 4 E 3	671 2202 757 2486 NE 7 NE 16 4697 3 23 E 3 E 3 E 7 38 4 D 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SATURDAY...MOSTLY CLEAR. LOWS IN THE LOWER 20S. HIGHS IN THE LOWER 50S. MINIMUM RH 30 PERCENT. SOUTH WINDS 5 TO 10 MPH. .SUNDAY...A SLIGHT CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS IN THE LOWER 30S. HIGHS IN THE MID 50S. MINIMUM RH 52 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A SLIGHT CHANCE OF SHOWERS...THEN A SLIGHT CHANCE OF LIGHT RAIN. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 60 PERCENT. SOUTHEAST WINDS AROUND 10 MPH. .TUESDAY...A CHANCE OF RAIN...THEN A CHANCE OF SHOWERS AND THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 68 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH BECOMING SOUTH IN THE AFTERNOON. .WEDNESDAY...A CHANCE OF THUNDERSTORMS. A CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE MID 50S. MINIMUM RH 61 PERCENT. WEST WINDS AROUND 5 MPH.

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TNZ001>004-019>022-051-080315-BENTON(TN)-CARROLL-CROCKETT-DYER-GIBSON-HENRY-LAKE-OBION-WEAKLEY-INCLUDING...NORTHERN WEST TENNESSEE 602 AM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN NORTHERN WEST TENNESSEE FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TODAY	TONIGHT	FRI
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS PRECIP ENDS	33 (-21) 45 (+8) NW 9-13 G21 N 12-16 G22	NONE 0 14 (-16) 70 (-17) N 7-11	
MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-MSL) TRANSPORT WND (M/S) TRANSPORT WND (MPH) VENT INDEX (M2/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH) DISPERSION INDEX LASI STABILITY STAGNATION INDEX	3742 1227 4025 NW 12 NW 28 13692 4 35 N 13 N 29	42 4 E 3	671 2202 757 2486 N 8 N 17 5368 3 20 NW 3 NW 7 38 4 D 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SATURDAY...MOSTLY CLEAR. LOWS 10 TO 15. HIGHS IN THE MID 40S. MINIMUM RH 32 PERCENT. SOUTH WINDS 5 TO 10 MPH. .SUNDAY...A SLIGHT CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS IN THE UPPER 20S. HIGHS IN THE UPPER 40S. MINIMUM RH 58 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A SLIGHT CHANCE OF RAIN SHOWERS...THEN A SLIGHT CHANCE OF LIGHT RAIN. MOSTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE MID 50S. MINIMUM RH 64 PERCENT. SOUTHEAST WINDS AROUND 10 MPH. .TUESDAY...A CHANCE OF RAIN...THEN A CHANCE OF SHOWERS AND THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE MID 50S. MINIMUM RH 70 PERCENT. SOUTH WINDS 5 TO 10 MPH. .WEDNESDAY...A CHANCE OF THUNDERSTORMS. A CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE LOWER 50S. MINIMUM RH 68 PERCENT. WEST WINDS AROUND 5 MPH.

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TNZ048>050-052>055-088>091-080315-CHESTER-DECATUR-FAYETTE-HARDEMAN-HAYWOOD-HENDERSON-LAUDERDALE-MADISON-MCNAIRY-SHELBY-TIPTON-INCLUDING...SOUTHERN WEST TENNESSEE 602 AM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN SOUTHERN WEST TENNESSEE FRIDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TODAY	TONIGHT	FRI
PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS	45 (+12) NW 8-12 G22	CLEAR NONE 0 16 (-13) 68 (-20) N 7-11 0.00	MCLEAR NONE 0 36 28 LGT/VAR LGT/VAR 0.00
PRECIP ENDS MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-MSL) TRANSPORT WND (M/S) TRANSPORT WND (M/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH)	3742 1227 4025 NW 11 NW 24 12551 4 39 N 12 N 27	40	671 2202 757 2486 N 8 N 17 5368 4 20 N 3 N 6
DISPERSION INDEX	98	42	38
LASI	4	4	4
STABILITY STAGNATION INDEX	D 0	Е З	D 3
STAGNALLON THURS	0	5	5

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SATURDAY...MOSTLY CLEAR. LOWS 15 TO 20. HIGHS IN THE UPPER 40S. MINIMUM RH 31 PERCENT. SOUTH WINDS 5 TO 10 MPH. .SUNDAY...A SLIGHT CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS AROUND 30. HIGHS IN THE LOWER 50S. MINIMUM RH 55 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A SLIGHT CHANCE OF RAIN SHOWERS...THEN A SLIGHT CHANCE OF LIGHT RAIN. MOSTLY CLOUDY. LOWS AROUND 40. HIGHS IN THE MID 50S. MINIMUM RH 64 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .TUESDAY...A CHANCE OF RAIN...THEN A CHANCE OF SHOWERS AND THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 68 PERCENT. SOUTH WINDS 5 TO 10 MPH. .WEDNESDAY...A CHANCE OF THUNDERSTORMS. A CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE MID 50S. MINIMUM RH 64 PERCENT. NORTHWEST WINDS AROUND 5 MPH.

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MSZ001-007-008-010>012-020-021-080315-COAHOMA-DESOTO-PANOLA-QUITMAN-TALLAHATCHIE-TATE-TUNICA-YALOBUSHA-INCLUDING...NORTHWEST MISSISSIPPI...YALOBUSHA UNIT HOLLY SPRINGS NATIONAL FOREST 602 AM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN NORTHWEST MISSISSIPPI FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TODAY	TONIGHT	FRI
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS	42 (-12) 45 (+5) N 7-11 G21 N 12-16 G23	NONE 0 21 (-11) 64 (-29) N 7-11	MCLEAR NONE 0 40 25 NE 3-7 LGT/VAR 0.00
PRECIP ENDS MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-MSL) TRANSPORT WND (M/S) TRANSPORT WND (M/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH) DISPERSION INDEX LASI STABILITY STAGNATION INDEX	3742 1227 4025 N 12 N 26 13692 4 43 N 13 N 28	42 4 E 2	671 2202 757 2486 NE 9 NE 21 6039 3 23 NE 4 NE 9 38 4 D 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SATURDAY...MOSTLY CLEAR. LOWS IN THE LOWER 20S. HIGHS IN THE LOWER 50S. MINIMUM RH 29 PERCENT. SOUTH WINDS AROUND 5 MPH. .SUNDAY...A SLIGHT CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS IN THE LOWER 30S. HIGHS IN THE MID 50S. MINIMUM RH 50 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .MONDAY...A SLIGHT CHANCE OF SHOWERS...THEN A SLIGHT CHANCE OF LIGHT RAIN. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS AROUND 60. MINIMUM RH 57 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .TUESDAY...A CHANCE OF RAIN...THEN A CHANCE OF SHOWERS AND THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 64 PERCENT. SOUTH WINDS 5 TO 10 MPH. .WEDNESDAY...A CHANCE OF THUNDERSTORMS. A CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 60 PERCENT. NORTHWEST WINDS AROUND 5 MPH.

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MSZ002>006-009-013>017-022>024-080315-ALCORN-BENTON(MS)-CALHOUN-CHICKASAW-ITAWAMBA-LAFAYETTE-LEE(MS)-MARSHALL-MONROE-PONTOTOC-PRENTISS-TIPPAH-TISHOMINGO-UNION-INCLUDING...NORTH MISSISSIPPI PORTION NATCHEZ TRACE PARKWAY... NORTH UNIT TOMBIGBEE NATIONAL FOREST...NORTHEAST MISSISSIPPI 602 AM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN NORTHEAST MISSISSIPPI FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TODAY	TONIGHT	FRI
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS	45 (+10) N 7-11 G20 N 12-16 G22	67 (-24)	MCLEAR NONE 0 39 24 N 4-8 LGT/VAR 0.00
PRECIP ENDS MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-MSL) TRANSPORT WND (M/S) TRANSPORT WND (M/S) TRANSPORT WND (MPH) VENT INDEX (M2/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH) DISPERSION INDEX LASI STABILITY STAGNATION INDEX	3742 1227 4025 N 13 N 30 14833 4 40 N 12 N 26	42 4 E 2	671 2202 757 2486 N 9 N 21 6039 3 21 N 4 N 9 38 4 D 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SATURDAY...MOSTLY CLEAR. LOWS 15 TO 20. HIGHS IN THE LOWER 50S. MINIMUM RH 30 PERCENT. SOUTH WINDS AROUND 5 MPH. .SUNDAY...A SLIGHT CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS AROUND 30. HIGHS IN THE MID 50S. MINIMUM RH 52 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .MONDAY...A SLIGHT CHANCE OF RAIN SHOWERS...THEN A SLIGHT CHANCE OF LIGHT RAIN. MOSTLY CLOUDY. LOWS AROUND 40. HIGHS IN THE UPPER 50S. MINIMUM RH 59 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .TUESDAY...A CHANCE OF RAIN...THEN A CHANCE OF SHOWERS AND THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS AROUND 60. MINIMUM RH 65 PERCENT. SOUTH WINDS 5 TO 10 MPH. .WEDNESDAY...A CHANCE OF THUNDERSTORMS. A CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 61 PERCENT. NORTHWEST WINDS AROUND 5 MPH.

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Figure 2. Example of Afternoon Fire Weather Planning Forecasts to be Issued.

FNUS54 KMEG 072056 FWFMEG

FIRE WEATHER PLANNING FORECAST FOR THE MIDSOUTH NATIONAL WEATHER SERVICE MEMPHIS TN 256 PM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN MOST OF THE MIDSOUTH FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

.DISCUSSION...

ARCTIC HIGH PRESSURE WILL MOVE OVER THE MID SOUTH TONIGHT AND FRIDAY. HIGH PRESSURE WILL THEN SHIFT EAST TO THE SOUTHEAST U.S. COAST ON SATURDAY. VERY COLD TEMPERATURES WILL SETTLE OVER THE REGION THROUGH FRIDAY NIGHT WITH A SLOW WARMING TREND THIS WEEKEND.

AFTERNOON RELATIVE HUMIDITIES WILL GET DOWN TO 18 TO 20 PERCENT IN DRY PLACES FRIDAY AND SATURDAY.

ARZ008-009-017-018-026>028-MOZ113-115-081200-CLAY-CRAIGHEAD-DUNKLIN-GREENE-LAWRENCE-MISSISSIPPI-PEMISCOT-POINSETT-RANDOLPH-INCLUDING...MISSOURI BOOTHEEL...NORTHEAST ARKANSAS 256 PM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN THE MISSOURI BOOTHEEL AND NORTHEAST ARKANSAS FRIDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TONIGHT	FRI	FRI NIGHT	SAT
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH)		MCLEAR NONE 0 35 (+1) 26 (-8) LGT/VAR	CLEAR NONE 0 19 80	MCLEAR NONE 0 46 31 S 4-8
PM 20 FT WIND (MPH)	N 4-8		LGT/VAR	
PRECIP AMOUNT (IN)		0.00	0.00	0.00
PRECIP DUR (HRS)				
PRECIP BEGINS				
PRECIP ENDS				
MIXING HGT (M-AGL)		771		533 1749
MIXING HGT (FT-AGL) MIXING HGT (M-MSL)		2531 857		1749 619
MIXING HGI (M-MSL) MIXING HGT (FT-MSL)		2817		2035
TRANSPORT WND (M/S)		SW 3		SW 9
TRANSPORT WND (MPH)		SW 6		SW 20
VENT INDEX (M2/S)		2313		4797
CATEGORY DAY		2		3
500M MIX HGT TEMP (F)		29		44
500M TSPT WIND (M/S)		SE 3		SW 9
500M TSPT WIND (MPH)	2.6	SE 7	1 Г	SW 21
DISPERSION INDEX LASI	36 4	35 4	15 3	62 3
STABILITY	4 F	4 B	S F	C C
DIVDITIII	Ľ		Ľ	C

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STAGNATION INDEX 3 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SUNDAY...PARTLY CLOUDY. LOWS IN THE UPPER 20S. HIGHS IN THE LOWER 50S. MINIMUM RH 44 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A CHANCE OF RAIN SHOWERS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE MID 50S. MINIMUM RH 73 PERCENT. SOUTH WINDS 5 TO 10 MPH. .TUESDAY...SHOWERS LIKELY. THUNDERSTORMS LIKELY. MOSTLY CLOUDY. LOWS IN THE UPPER 40S. HIGHS IN THE MID 50S. MINIMUM RH 74 PERCENT. SOUTHEAST WINDS AROUND 10 MPH INCREASING TO 15 TO 20 MPH IN THE AFTERNOON. .WEDNESDAY...SHOWERS AND THUNDERSTORMS LIKELY...THEN A SLIGHT CHANCE OF SHOWERS. PARTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 63 PERCENT. WEST WINDS 5 TO 10 MPH. .THURSDAY...PARTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE UPPER 40S. MINIMUM RH 57 PERCENT. WEST WINDS 10 TO 15 MPH.

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ARZ035-036-048-049-058-081200-CRITTENDEN-CROSS-LEE(AR)-PHILLIPS-ST. FRANCIS-INCLUDING...EAST-CENTRAL ARKANSAS...ST. FRANCIS NATIONAL FOREST 256 PM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN EAST-CENTRAL ARKANSAS FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TONIGHT	FRI	FRI NIGHT	SAT
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN)	CLEAR NONE 0 20 (-12) 59 (-24) N 5-9 0.00	MCLEAR NONE 0 39 (+2) 20 (-13) LGT/VAR LGT/VAR 0.00	CLEAR NONE 0 22 72 LGT/VAR 0.00	MCLEAR NONE 0 50 24 S 3-7 S 5-9 0.00
PRECIP DUR (HRS) PRECIP BEGINS	0.00	0.00	0.00	0.00
PRECIP ELGINS PRECIP ENDS MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (FT-MSL) TRANSPORT WND (M/S) TRANSPORT WND (MPH) VENT INDEX (M2/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH)		762 2501 846 2885 N 1 N 2 762 1 30 NE 3 NE 6		580 1904 664 2288 SW 7 SW 15 4060 3 44 SW 7 SW 15
DISPERSION INDEX LASI STABILITY STAGNATION INDEX	36 4 F 2	NE 0 35 4 B 3	15 4 F 3	62 3 C 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SUNDAY...PARTLY CLOUDY. LOWS IN THE LOWER 30S. HIGHS IN THE MID 50S. MINIMUM RH 40 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 63 PERCENT. SOUTH WINDS AROUND 10 MPH. .TUESDAY...SHOWERS LIKELY...THEN A CHANCE OF SHOWERS AND THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE UPPER 40S. HIGHS AROUND 60. MINIMUM RH 70 PERCENT. SOUTH WINDS 10 TO 20 MPH. .WEDNESDAY...SHOWERS AND THUNDERSTORMS LIKELY...THEN A SLIGHT CHANCE OF SHOWERS. PARTLY CLOUDY. LOWS IN THE UPPER 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 60 PERCENT. WEST WINDS 5 TO 10 MPH. .THURSDAY...PARTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE LOWER 50S. MINIMUM RH 54 PERCENT. WEST WINDS 10 TO 15 MPH.

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TNZ001>004-019>022-051-081200-BENTON(TN)-CARROLL-CROCKETT-DYER-GIBSON-HENRY-LAKE-OBION-WEAKLEY-INCLUDING...NORTHERN WEST TENNESSEE 256 PM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN NORTHERN WEST TENNESSEE FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TONIGHT	FRI	FRI NIGHT	SAT
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH)	CLEAR NONE 0 12 (-18) 79 (-6) N 5-9	MCLEAR NONE 0 33 (0) 29 (-11) LGT/VAR LGT/VAR	CLEAR NONE 0 13 92 LGT/VAR	MCLEAR NONE 0 43 27 S 3-7 S 5-9
PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS PRECIP ENDS	0.00	0.00	0.00	0.00
MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (M-MSL) MIXING HGT (M-MSL) TRANSPORT WND (M/S) TRANSPORT WND (MPH) VENT INDEX (M2/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH)	26	797 2616 880 2916 SW 1 SW 2 797 1 27 SW 3 SW 7 25	15	686 2251 769 2551 SW 7 SW 16 4802 3 41 SW 8 SW 18 62
DISPERSION INDEX LASI STABILITY STAGNATION INDEX	36 4 F 3	35 4 B 3	15 4 F 3	62 3 C 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SUNDAY...PARTLY CLOUDY. LOWS IN THE LOWER 20S. HIGHS IN THE MID 50S. MINIMUM RH 35 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE MID 50S. MINIMUM RH 63 PERCENT. SOUTH WINDS AROUND 10 MPH. .TUESDAY...A CHANCE OF SHOWERS. A CHANCE OF THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE MID 50S. MINIMUM RH 76 PERCENT. SOUTHEAST WINDS 10 TO 15 MPH. .WEDNESDAY...SHOWERS AND THUNDERSTORMS LIKELY...THEN A CHANCE OF SHOWERS. PARTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 60 PERCENT. WEST WINDS 10 TO 15 MPH. .THURSDAY...PARTLY CLOUDY. LOWS IN THE MID 30S. HIGHS IN THE UPPER 40S. MINIMUM RH 60 PERCENT. WEST WINDS 10 TO 15 MPH.

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TNZ048>050-052>055-088>091-081200-CHESTER-DECATUR-FAYETTE-HARDEMAN-HAYWOOD-HENDERSON-LAUDERDALE-MADISON-MCNAIRY-SHELBY-TIPTON-INCLUDING...SOUTHERN WEST TENNESSEE 256 PM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN SOUTHERN WEST TENNESSEE FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TONIGHT	FRI	FRI NIGHT	SAT
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH)	CLEAR NONE 0 15 (-14) 69 (-19) N 5-9	MCLEAR NONE 0 35 (-1) 24 (-15) LGT/VAR LGT/VAR	CLEAR NONE 0 17 81 LGT/VAR	MCLEAR NONE 0 46 24 S 2-6 S 4-8
	0.00	0.00	0.00	0.00
PRECIP DUR (HRS) PRECIP BEGINS PRECIP ENDS				
MIXING HGT (M-AGL)		783		690
MIXING HGT (FT-AGL)		2570		2263
MIXING HGT (M-MSL)		846		774
MIXING HGT (FT-MSL) TRANSPORT WND (M/S)		2885 NW 1		2547 SW 6
TRANSPORT WND (MPH)		NW 1		SW 13
VENT INDEX (M2/S)		783		4140
CATEGORY DAY		1		3
500M MIX HGT TEMP (F) 500M TSPT WIND (M/S)		28 NE 3		42 SW 7
500M ISPI WIND (M/S) 500M TSPT WIND (MPH)		NE 6		SW 7 SW 15
DISPERSION INDEX	36	35	15	62
LASI	4	4	4	3
STABILITY	F	В	F	C 3
STAGNATION INDEX	3	3	3	3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SUNDAY...PARTLY CLOUDY. LOWS IN THE MID 20S. HIGHS IN THE MID 50S. MINIMUM RH 35 PERCENT. SOUTH WINDS 5 TO 10 MPH.

.MONDAY...A CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 56 PERCENT. SOUTH WINDS 5 TO 10 MPH. .TUESDAY...A CHANCE OF SHOWERS. A CHANCE OF THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE UPPER 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 69 PERCENT. SOUTHEAST WINDS 10 TO 20 MPH. .WEDNESDAY...SHOWERS AND THUNDERSTORMS LIKELY...THEN A SLIGHT CHANCE OF SHOWERS. PARTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. MINIMUM RH 57 PERCENT. WEST WINDS 10 TO 15 MPH. .THURSDAY...PARTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE UPPER 40S. MINIMUM RH 53 PERCENT. WEST WINDS 10 TO 15 MPH.

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MSZ001-007-008-010>012-020-021-081200-COAHOMA-DESOTO-PANOLA-OUITMAN-TALLAHATCHIE-TATE-TUNICA-YALOBUSHA-INCLUDING...NORTHWEST MISSISSIPPI...YALOBUSHA UNIT HOLLY SPRINGS NATIONAL FOREST 256 PM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN NORTHWESTERN MISSISSIPPI FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TONIGHT	FRI	FRI NIGHT	SAT
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH) PM 20 FT WIND (MPH) PRECIP AMOUNT (IN) PRECIP DUR (HRS) PRECIP BEGINS	CLEAR NONE 0 21 (-10) 57 (-36) N 6-10 0.00	MCLEAR NONE 0 40 (-2) 18 (-17) LGT/VAR LGT/VAR 0.00	CLEAR NONE 0 22 65 LGT/VAR 0.00	MCLEAR NONE 0 51 20 S 2-6 S 3-7 0.00
PRECIP ENDS MIXING HGT (M-AGL) MIXING HGT (FT-AGL) MIXING HGT (M-MSL) MIXING HGT (FT-MSL) TRANSPORT WND (M/S) TRANSPORT WND (M/S) CATEGORY DAY 500M MIX HGT TEMP (F) 500M TSPT WIND (M/S) 500M TSPT WIND (MPH) DISPERSION INDEX LASI STABILITY STAGNATION INDEX	36 4 F 2	768 2519 846 2885 NE 2 NE 3 1536 1 31 NE 4 NE 9 35 4 B 3	15 4 F 3	655 2148 774 2547 S 5 S 10 3275 2 44 S 5 S 10 62 4 C 3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SUNDAY...PARTLY CLOUDY. LOWS IN THE LOWER 30S. HIGHS IN THE UPPER 50S. MINIMUM RH 37 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .MONDAY...A CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS IN THE LOWER 40S. HIGHS IN THE LOWER 60S. MINIMUM RH 55 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH.

8/18/2008

.TUESDAY...A CHANCE OF SHOWERS. A CHANCE OF THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE UPPER 40S. HIGHS IN THE LOWER 60S. MINIMUM RH 66 PERCENT. SOUTHEAST WINDS 10 TO 15 MPH. .WEDNESDAY...SHOWERS AND THUNDERSTORMS LIKELY...THEN A SLIGHT CHANCE OF SHOWERS. PARTLY CLOUDY. LOWS IN THE UPPER 40S. HIGHS AROUND 60. MINIMUM RH 56 PERCENT. WEST WINDS 5 TO 10 MPH. .THURSDAY...PARTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE LOWER 50S. MINIMUM RH 50 PERCENT. WEST WINDS 10 TO 15 MPH.

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MSZ002>006-009-013>017-022>024-081200-ALCORN-BENTON (MS) -CALHOUN-CHICKASAW-ITAWAMBA-LAFAYETTE-LEE (MS) -MARSHALL-MONROE-PONTOTOC-PRENTISS-TIPPAH-TISHOMINGO-UNION-INCLUDING...NORTH MISSISSIPPI PORTION NATCHEZ TRACE PARKWAY... HOLLY SPRINGS NATIONAL FOREST...NORTH UNIT TOMBIGBEE NATIONAL FOREST...NORTHEAST MISSISSIPPI 256 PM CST THU DEC 7 2006

...LOW HUMIDITY IS EXPECTED IN NORTHEASTERN MISSISSIPPI FRIDAY AND SATURDAY ACCORDING TO THE NATIONAL WEATHER SERVICE AT MEMPHIS TENNESSEE...

	TONIGHT	FRI	FRI NIGHT	SAT
CLOUD COVER PRECIP TYPE PRECIP CHANCE (%) TEMP (24H TREND) RH % (24H TREND) AM 20 FT WIND (MPH)	62 (-32)	MCLEAR NONE 0 39 (-4) 19 (-17) NE 2-6	CLEAR NONE 0 19 74	MCLEAR NONE 0 50 20 LGT/VAR S 2-6
PM 20 FT WIND (MPH) PRECIP AMOUNT (IN)		LGT/VAR 0.00	LGT/VAR 0.00	S 2-6 0.00
PRECIP AMOUNI (IN) PRECIP DUR (HRS) PRECIP BEGINS PRECIP ENDS	0.00	0.00	0.00	0.00
MIXING HGT (M-AGL)		783		719
MIXING HGT (FT-AGL)		2568		2359
MIXING HGT (M-MSL)		846		803
MIXING HGT (FT-MSL) TRANSPORT WND (M/S)		2885 NE 3		2647 S 3
TRANSPORT WND (MPH)		NE 6		s 7
VENT INDEX (M2/S)		2349		2157
CATEGORY DAY		2		2
500M MIX HGT TEMP (F) 500M TSPT WIND (M/S)		30 NE 4		43 S 4
500M ISII WIND (M/S) 500M TSPT WIND (MPH)		NE 9		s 9
DISPERSION INDEX	36	35	15	62
LASI	4	4	4	4
STABILITY	F	В	F	В
STAGNATION INDEX	2	3	3	3

REMARKS...NONE.

.FORECAST FOR DAYS 3 THROUGH 7...

.SUNDAY...PARTLY CLOUDY. LOWS IN THE MID 20S. HIGHS IN THE UPPER 50S. MINIMUM RH 34 PERCENT. SOUTH WINDS 5 TO 10 MPH. .MONDAY...A CHANCE OF RAIN SHOWERS. PARTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE UPPER 50S. MINIMUM RH 53 PERCENT. SOUTHEAST WINDS 5 TO 10 MPH. .TUESDAY...A CHANCE OF SHOWERS. A CHANCE OF THUNDERSTORMS. MOSTLY CLOUDY. LOWS IN THE MID 40S. HIGHS AROUND 60. MINIMUM RH 67 PERCENT. SOUTHEAST WINDS 10 TO 15 MPH. .WEDNESDAY...SHOWERS AND THUNDERSTORMS LIKELY...THEN A SLIGHT CHANCE OF SHOWERS. PARTLY CLOUDY. LOWS IN THE MID 40S. HIGHS IN THE LOWER 60S. MINIMUM RH 54 PERCENT. WEST WINDS 5 TO 10 MPH. .THURSDAY...PARTLY CLOUDY. LOWS IN THE UPPER 30S. HIGHS IN THE LOWER 50S. MINIMUM RH 48 PERCENT. WEST WINDS 5 TO 10 MPH.

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#### 2. NATIONAL FIRE DANGER RATING SYSTEM FORECASTS

Fire danger forecasts will be composed under the MEMFWMMEG identifier and released when a quality NFDRS observation is transmitted to NWS Memphis via WIMS.

a. Stations - NFDRS forecasts will be issued for the stations in Table 2 when the weather equipment is in good repair and when a NFDRS observation is received:

Table 2. NFDRS Forecast Sites

Station Name	e Station Number	r State County	Latitude	Longitude	Land Unit
Poinsett	032801	AR Cross	35.53	-90.69	City of Harrisburg, AR
Winborn	220202	MS Marsha	11 34.62	-89.31	Holly Springs Natl. Forest
Tishomingo	220601	MS Tishom	ingo 34.79	-88.22	MFC Fire Substation
Yalobusha	222101	MS Yalobus	sha 33.99	-89.80	Holly Springs Natl. Forest
Monroe	222401	MS Monroe	33.87	-88.48	Monroe Co. Airport RAWS
Dyersburg	403801	TN Dyer	35.99	-89.41	Dyersburg Airport RAWS
Camden	404001	TN Benton	36.07	-88.17	Camden Fire Tower
Chickasaw	408001	TN Chester	35.37	-88.83	Chickasaw State Forest

b. Issuance - NFDRS forecasts are issued when a WIMS observation is received. Forecasts should be transmitted back to WIMS within an hour if there is no severe weather. During severe weather, the NFDRS forecast should be composed when possible. No issuance time limit will be imposed in this case.

c. Figure 3 contains an example of the forecast and an explanation of the parameters included.

Figure 3. Example NFDRS Site Forecast
A. Example
ZCZC MEMFWMMEG ALL
TTAA00 KMEG DDHHMM
FCST,221502,011014,13,9,75,70,1,3,SSW,08,M,80,69,100,50,3,5,N
B. Parameter definition (Refer to example.)
FCST Identifies this line to be a forecast.
221502 Site number
011014 Valid date of forecast (YYMMDD). This is always

13 9	<pre>tomorrow's date. Valid hour. Always enter "13". Weather code valid 13:00 LST tomorrow as follows: 0 Clear 1 Scattered clouds (1/8 to 4/8) 2 Broken clouds (5/8 to 7/8) 3 Cloudy (&gt; 7/8) 4 Fog 5 Drizzle 6 Rain (continuous) 7 Snow or sleet 8 Showers</pre>
	9 Thunderstorms
75	Dry bulb temperature valid 1300 LST tomorrow.
70	Relative humidity valid 1300 LST tomorrow.
1	Lightning Activity Level (LAL1) 1300 today to 2400
	LST tonight. LAL codes are:
	1 to 5with 1 indicating no thunderstorms
_	and 5 calling for numerous thunderstorms.
3	Lightning Activity Level (LAL2) midnight to 1300
	LST tomorrow.
SSW	Wind direction valid 1300 LST tomorrow.
08	Wind speed (MPH@20 FT) valid 1300 tomorrow.
М	Fuel moisture. Fuel moisture is not forecast, so "M" for missing always entered.
80	Maximum temperature 1300 LST today to 1300 LST tomorrow.
69	Minimum temperature 1300 LST today to 1300 LST tomorrow.
100	Maximum humidity 1300 LST today to 1300 LST tomorrow.
50	Minimum humidity 1300 LST today to 1300 LST tomorrow.
3	Precipitation duration (hours) 1300 LST today to 0500 LST tomorrow.
5	Precipitation duration (hours) 0500 LST tomorrow to 1300 LST tomorrow.
Ν	Fuel wetness flag valid 1300 LST tomorrow. Flags are "N"
	for dry fuel and "Y" for wet fuel. (Has to be raining
	at 1300 LST tomorrow to be coded wet. A "Y" in combination
	with a weather code of 5, 6, or 7 will result in zero fire
	danger.)
	-

d. Dissemination - NFDRS forecasts are to be disseminated via NWS circuits to WIMS. NFDRS forecasts should also be disseminated over the internet at <u>http://www.srh.noaa.gov/meg</u>.

#### 3. SPOT WEATHER FORECASTS FOR WILDFIRES AND PRESCRIBED BURNS

a. General information - Spot forecasts for prescribed burns will be made for federal agencies and their contractors. But, the NWS should provide spot forecasts to local, state, and federal agencies, as well as their contractors, when there is a danger to life and property or when there is a wildfire. The NWS product identifier used is MEMFWSMEG.

b. Request procedure - Agencies should request spot forecasts via the internet from <u>http://www.srh.noaa.gov/meg</u>. The procedure to follow will be:

- 1. Access the internet
- 2. Select the NWS webpage (<u>http://www.srh.noaa.gov/meg</u>)
- 3. Select the Fire Weather page (left column of front page)

- 4. Select "Request a Spot Forecast"
- 5. Select "Submit a new Spot Request"
- 6. Fill out the spot forecast request form. Foresters should provide a weather observation taken near the site of the spot forecast.
- 7. Select "Submit Request"
- 8. Proofread request
- 9. Select "Submit Request" again

c. Contents - Contents of the spot weather forecast should consist of forecasts every 1-2 hours of mixing height (ft and m) (AGL and MSL), temperature (F), humidity, 20 ft wind direction/speed/gust (mph), sky cover, chance of precipitation, and weather type from fire ignition to sunset for prescribed burns and from the current hour to anticipated extinguish hour of wildfires. Figure 4 shows an example spot forecast for a prescribed burn.

Figure 4. Spot Forecast For a Prescribed Burn With 10 am Ignition 000 FNUS74 KMEG 251105 FWSMEG SPOT FORECAST FOR CHICKASAW VILLAGE...NATCHEZ TRACE PARKWAY NATIONAL WEATHER SERVICE MEMPHIS TN 605 AM CDT TUE MAR 25 2008 FORECAST IS BASED ON IGNITION TIME OF 1000 CDT ON MARCH 25. IF CONDITIONS BECOME UNREPRESENTATIVE...CONTACT THE NATIONAL WEATHER SERVICE. .DISCUSSION... DRY AND WARMER CONDITIONS CAN BE EXPECTED TODAY WITH GUSTY SOUTH WINDS DEVELOPING. EXPECT SPEEDS 10 TO 20 MPH WITH HIGHER GUSTS. RELATIVE HUMIDITY VALUES WILL DROP TO AROUND 30 PERCENT THIS AFTERNOON AS WELL. .TODAY... MAX TEMPERATURE....AROUND 65. TIME (CDT) 10 AM NOON 2 PM 4 PM SKY COVER.....MCLEAR MCLEAR PCLDY PCLDY WEATHER COV..... WEATHER TYPE....NONE NONE NONE NONE TEMPERATURE445361RH (%)564034 64 31 20FT WIND MPH...S 12 S 13 S 13 S 12 18 18 20FT WIND GUST..16 16 MIXHGT AGL FT...1635 3575 4912 4662 MIXHGT AGL M....498 1089 1497 1420 MIXHGT MSL FT...1940 3888 5218 4967 MIXHGT MSL M....591 1185 1590 1513

TRANS WND MPH...S 13 S 20 S 20 S 20

 TRANS WND M/S...S 6
 S 9
 S 9
 S 9

 PRECIP CHC (%)..0
 0
 0
 0

d. Issuance Time - Spot forecasts should be prepared within 30 minutes of receipt of the request during non-severe weather. During severe weather, spot forecasts will be issued when possible.

e. Dissemination - The NWS will post the spot forecast on its webpage. Foresters will find the spot forecast by going to the page titled "Memphis Spot Forecasts" at the website <u>http://spot.nws.noaa.gov/cgi-bin/spot/spotmon?site=meg</u>. The forecast can be displayed by clicking on the appropriate fire link after it is listed as completed.

f. Verification - Client agencies are asked to provide observations of the weather and smoke plume height at the fire site during the fire.

#### 4. FIRE WEATHER NOTIFICATION MESSAGES

a. General information – Fire weather notification messages are used to give the public information about burn bans, fire weather alerts, and other high fire danger situations. Foresters can request for a fire weather notification message. The NWS product identifier used is MEMFWNMEG.

b. Release criteria – Fire weather notification messages should be released at the request of clients.

c. Contents – Requesting agencies can specify the information wanted in the text of the fire weather notification message. An example of a fire weather notification message is in Figure 5.

Figure 5. Example Midsouth Fire Weather Notification Message

ZCZC MEMFWNMEG ALL TTAA00 KMEG DDHHMM

TNZ001>004-019>22-048>055-088>091-270000-

FIRE WEATHER NOTIFICATION MESSAGE NATIONAL WEATHER SERVICE MEMPHIS TN 600 AM CST THU JUL 26 2007

...WEST TENNESSEE BURN BAN...

THE TENNESSEE DIVISION OF FORESTRY HAS ISSUED A BURN BAN FOR ALL OF WEST TENNESSEE UNTIL FURTHER NOTICE.

DROUGHT CONDITIONS FOR THE PAST MONTH HAVE MADE FORESTS VERY DRY. DANGER OF FOREST FIRES IS HIGH.

ANOTHER FIRE WEATHER STATEMENT WILL BE ISSUED 600 AM TUESDAY.

d. Issuances/Dissemination – The forecasters will release the fire weather notification message through regular NWS communication channels which includes NOAA Weather Radio, NOAA Weather Wire Service, and the internet.

e. Cancellation - Fire weather notification messages can be cancelled or allowed to expire within 24 hours, whichever comes first. Daily coordination should be made by the requesting agency when a message is in effect. The NWS will issue cancellation messages after consultation with users.

#### 5. FIRE WEATHER WATCH/RED FLAG WARNING

a. General information - The NWS will prepare fire weather watches and red flag warnings when watch/warning criteria are met. Red flag warnings are typically for the first period of the morning forecast and the second period of the afternoon forecast. Fire weather watches are typically for the third period of the morning forecast and the fourth period of the afternoon forecast. The NWS product identifier used is MEMRFWMEG.

b. Request procedure – The NWS should notify user agencies by phone the afternoon before red flag conditions are expected to occur and two afternoons before a watch will occur.

c. Fire watch/red flag limits - Criteria for fire weather watches and red flag warnings are determined by agencies in each state. Both watches and warning use the same criteria. Broadly speaking, red flag warnings cover the first 24 hours and fire weather watches cover 24 to 72 hours. Watch/warning criteria are as follows:

Table 3. Midsouth Fire Weather Watch/Red Flag Warning Criteria

	Wind (20 ft)	Humidity	Temperature	10 hr Fuel Moisture
Arkansas -	>= 14 mph	<= 25%		<= 10%
Mississippi-	>= 15 mph	<= 25% (<=80% at night)		<= 10%
Missouri -	>= 20 mph	<= 20%	>= 65	<= 10%
Tennessee -	>= 18 mph	<= 25%		<= 10%

d. Content - Agencies requesting a warning/watch will tell the NWS forecaster what to include in the messages, counties to be covered, and posting times. Once the forecaster has composed the message, he/she should call the requesting person and read the warning/watch to the requestor. When the requesting agency is satisfied with the contents of the red flag warning/fire weather watch, the forecaster should release the warning or watch on NWS circuits and post it on the NWS Memphis webpage during the appropriate afternoon or morning. Figure 6 is an example fire weather watch, and Figure 7 is an example red flag warning.

Figure 6. Example Fire Weather Watch ZCZC MEMRFWMEG ALL TTAA00 KMEG DDHHMM FIRE WEATHER WATCH NATIONAL WEATHER SERVICE MEMPHIS TN 100 PM CST THU JUL 26 2007

ARZ008-161800-

...FIRE WEATHER WATCH SATURDAY...

COUNTIES INCLUDED IN THE WARNING ARE: IN ARKANSAS - LAWRENCE

DISCUSSION: A FIRE WEATHER WATCH HAS BEEN ISSUED FOR LAWRENCE COUNTY ARKANSAS FOR WEDNESDAY. INTENSE LOW PRESSURE IN THE MIDWEST WILL PRODUCE STRONG...DRY WINDS.

WINDS 20 FEET ABOVE THE GROUND WILL BE SOUTHWEST 14 MPH WITH GUSTS TO 20 MPH. HUMIDITY WILL FALL TO 25% BY 11 AM AND THEN GO ON DOWN TO 15% WEDNESDAY AFTERNOON. FIRE DANGER WILL BE EXTREME.

A FIRE WEATHER WATCH MEANS THAT FIRE DANGER IS DANGEROUSLY HIGH. FIRES THAT START WILL SPREAD QUICKLY, BURN FAST, AND BE VERY DIFFICULT TO CONTROL.

ANOTHER STATEMENT CONCERNING THIS FIRE WEATHER WATCH WILL BE ISSUED NOON TUESDAY.

PLEASE ADVISE THE APPROPRIATE OFFICIALS AND FIRE CREWS OF THIS FIRE WEATHER WATCH.

Figure 7. Example Red Flag Warning

ZCZC MEMRFWMEG ALL TTAA00 KMEG DDHHMM

RED FLAG WARNING NATIONAL WEATHER SERVICE MEMPHIS TN 100 PM CST MON JUL 26 2004

ARZ008-280000-

... RED FLAG WARNING FOR STRONG SOUTHWEST WINDS AND LOW HUMIDITY FROM 600 AM TO SUNSET TUESDAY NORTHEAST ARKANSAS...

COUNTIES INCLUDED IN THE WARNING ARE: IN ARKANSAS - LAWRENCE

DISCUSSION: A RED FLAG WARNING HAS BEEN ISSUED FOR LAWRENCE COUNTY ARKANSAS TUESDAY. INTENSE LOW PRESSURE IN THE MIDWEST WILL PRODUCE STRONG...DRY WINDS.

WINDS 20 FEET ABOVE GROUND WILL BE FROM THE SOUTHWEST 14 MPH.

HUMIDITY WILL DROP BELOW 25% BY 11 AM AND GO ON DOWN TO 15% THIS TUESDAY AFTERNOON. FIRE DANGER WILL BE EXTREME.

A RED FLAG WARNING MEANS THAT FIRE DANGER IS DANGEROUSLY HIGH. FIRES THAT START WILL SPREAD QUICKLY, BURN FAST, AND BE VERY DIFFICULT TO CONTROL.

ANOTHER STATEMENT CONCERNING THIS RED FLAG EVENT WILL BE ISSUED AT 6 PM CST. ADDITIONAL UPDATES WILL BE TRANSMITTED IF CONDITIONS WARRANT. PLEASE ADVISE THE APPROPRIATE OFFICIALS AND FIRE CREWS OF THIS RED FLAG WARNING.

e. Dissemination - Fire weather watches/red flag warnings should be transmitted on NWS circuits and posted on the NWS Memphis webpage.

f. Cancellation - Fire weather watches/red flag warnings should be cancelled or allowed to expire within 24 hours of issuance, whichever comes first. The NWS should issue cancellation messages only after consultation with users.

#### 6. ROUTINE FIRE WEATHER POINT FORECAST MATRICES

Routine Fire Weather Point Forecast Matrices should be issued each morning and afternoon.

a. General features – The NWS product identifier used is MEMPFWMEG for both the morning and afternoon forecast.

b. Stations – The fire weather point forecast matrices should be issued for the following five sites.

Station Name	<u>State</u>	County	Latitude	Longitude	Land Unit
Poinsett	AR	Cross	35.53	-90.69	City of Harrisburg, AR
Winborn	MS	Marshall	34.62	-89.31	Holly Springs Natl. Forest
Tishomingo	MS	Tishoming	o 34.79	-88.22	MFC Fire Substation
Yalobusha	MS	Yalobusha	33.99	-89.80	Holly Springs Natl. Forest
Monroe	MS	Monroe	33.87	-88.48	Monroe Co. Airport RAWS
Camden	TN	Benton	36.07	-88.17	Camden Fire Tower
Chickasaw	TN	Chester	35.37	-88.83	Chickasaw State Forest
Dyersburg	TN	Dyer	35.99	-89.41	Dyersburg Airport RAWS
St. Francis	AR	Lee	34.76	-90.72	St. Francis Natl. Forest

Table 3. Fire Weather Point Forecast Matrices Sites

c. Release time – Fire weather point forecast matrices should be issued twice a day, similar to the fire weather planning forecasts. Morning forecasts are to be released by 6:00 am Central Time. Afternoon forecasts are to be released as soon as possible after other public products and at least by 4:00 pm Central Time. Many times the afternoon forecast should be ready by 3:30 pm Central Time. Fire weather point forecast matrices should be issued throughout the year. Unscheduled updates will be made when determined necessary by the NWS or foresters.

d. Content Examples (See Figure 8)

1. Header containing product title, originating office, and time/date.

2. Fire Weather Point Forecast Matrices for each 5 sites (1 through 5). (Each parameter represents the point forecast for the given site.)

Max/min air temperature (F) Hourly air temperature (F) **Dewpoint** (F) Min/max relative humidity (%) Hourly relative humidity (%) 20 ft wind direction and speed (mph) Wind chill (if below 30 F)/heat index (if above 90 F) **Cloud cover Chance of precipitation (%) Precipitation amounts (in)** Weather type Any obstruction to visibility Mixing height (m and ft) (AGL and MSL) Transport wind direction and speed (m/s and mph) Ventilation index  $(m^2/s)$ **Category day 500** meter mixing height temperature (**F**) 500 meter transport wind direction and speed (m/s and mph) **Dispersion index** Lower atmospheric stability index Arkansas stability index Mississippi stagnation index Any watches, warnings, or advisories in effect at that given time

Parameters are generally given every 3 hours for days 1-3, then every 6 hours for days 4-7. For days 4-7, only max/min air temperature, hourly air temperature, dewpoint, hourly relative humidity, 20 ft wind direction and speed, cloud cover, chance of precipitation, and weather type are given.

e. Dissemination – Fire weather point forecast matrices should be disseminated via the internet, NWS circuits, and the NOAA Weather Wire Service. Forecasts should be posted on the internet within 15 minutes after release. The fire weather point matrices can be obtained from <a href="http://www.srh.noaa.gov/meg">http://www.srh.noaa.gov/meg</a>.

f. Updates – The NWS will update the MEMPFWMEG when needed as determined by weather conditions and user requests.

g. Examples - An example of a morning forecast is in Figure 8.

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Figure 8. Example of Morning Fire Weather Point Forecast Matrices
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FOUS54 KMEG 252001

NATIONAL WEATHER SERVICE MEMPHIS TN

PFWMEG

MSZ002-261000-WINBORN NFDRS SITE-MARSHALL MS 34.69N 89.30W 301 PM CDT TUE MAR 25 2008

301 PM CDT TUE MAR 25 2008

DATE UTC 3HRLY CDT 3HRLY			6/08     THU       20     23     02     05     08     11       15     18     21     00     03     06		
MIN/MAX TEMP DEWPT MAX/MIN RH RH WIND DIR WIND SPD CLOUDS CLOUDS (%) POP 12HR QPF 12HR MIXHGT M AGL MIXHGT FT AGL MIXHGT FT AGL MIXHGT FT MSL TRANSWIND DIR TWIND SPD MS TWIND SPD MS TWIND SPD MS TWIND SPD MPH VENT INDEX CATEGORY DAY 500M MIXHGT T 500M TWND DIR 500M TWND M/S 500M TWND MPH DISPERSION LASI STABILITY STAG INDEX	S S 11 8 SC SC S 28 45 4 72 239 85 279 1 1 6 1 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	51 52 53 53 45 76 55 46 48 S S S S 10 13 13 11 B1 B1 B1 B1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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ARZ027-261000-POINSETT NFDRS SITE-POINSETT AR 35.53N 90.69W

8/18/2008

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## Midsouth Fire Weather Operating Plan 2008

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DAY 1 THROUGH	3								
CLOUDS (%) POP 12HR (%). QPF 12HR (IN) WEATHER TYPE RAIN.S TSTMS. DRIZZL SNOW SNOWSH SLEET.	MAX/MIN R OINT COMPA )) ) CL = CLEA B1 = MOST	AIN AIN SHOWE HUNDERSTO RIZZLE NOW NOW SHOWE LEET	A DI M2 RI 20 Q2 M3 CI CEW; SC ?; B2 = CI PI L3 CEW; SC CEW; SC	IR TEMP EW POIN AXIMUM/ ELATIVE D FT. W D FT. W IND CHI EAT IND LOUD CO C = SCA = CONSI LOUD CO ROBABIL	ERATURI T TEMPI MINIMUI HUMID IND DII IND SPI LL TEM EX VER CA' TTERED DERABLI VER AS ITY FOI	E ERATUF M HUMI ITY RECTIC EED PERATU TEGORY ; E CLOU A PEF R ACCU	RE DITY N JRE Z JDS; OV RCENTAG JMULAT:	/ = OVE Ge ING PRE	CIPITATION

FRZG RAIN.....FREEZING RAIN

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FRZG DRZL.....FREEZING DRIZZLE
    COVERAGE...
     IS.....ISOLATED
     SC.....SCATTERED
     NM.....NUMEROUS
     O....OCCASIONAL
     S.....SLIGHT CHANCE
     C....CHANCE
     L....LIKELY
     WD.....WIDESPREAD
     D.....DEFINITE
     AR....AREAS
     PA.....PATCHY
OBVIS..... TO VISIBILITY
   TYPE...
     F.....FOG
     PF.....PATCHY FOG
     +PF.....PATCHY DENSE FOG
     F+....DENSE FOG
     H....HAZE
     BS.....BLOWING SNOW
     K.....SMOKE
     BD.....BLOWING DUST
MIXHGT M AGL..... MIXING HEIGHT IN METERS ABOVE GROUND LEVEL
MIXHGT FT AGL..... MIXING HEIGHT IN FEET ABOVE GROUND LEVEL
MIXHGT M MSL......MIXING HEIGHT IN METERS MEAN SEA LEVEL
MIXHGT FT MSL..... SEA LEVEL
TRANSWIND DIR (8 POINT COMPASS).....TRANSPORT WIND DIRECTION
TWIND SPD MS (M/S) \ldots \ldots \ldots TRANSPORT WIND SPEED IN METERS PER SECOND
TWIND SPD MPH (MPH).....TRANSPORT WIND SPEED IN MILES PER HOUR
VENT INDEX (M2/S).....VENT INDEX IN METERS SQUARED PER SECOND
CATEGORY DAY..... DAY BASED ON VENT INDEX
   EXAMPLE: 1 = <2000; 2 = >=2000 AND <4000; 3 = >=4000 AND <8000;
           4 = >=8000 AND <16000; 5 = >=16000
500M MIXHGT T (F).....SURFACE TEMPERATURE NEEDED TO CREATE MIXING
UP TO 500 METERS ABOVE THE GROUND
500M TWND DIR (8 POINT COMPASS)....TRANSPORT WIND DIRECTION AT 500 METERS AGL
500M TWND M/S.....TRANSPORT WIND AT 500 METERS AGL IN M/S
DISPERSION......DISPERSION INDEX FOR SMOKE DISPERSION
    EXAMPLE: 1-6 = VERY POOR; 7-12 = POOR; 13-20 = GENERALLY POOR
           21-40 = FAIR; 41-60 = GENERALLY GOOD; 61-100 = GOOD
           101+ = EXCELLENT
LASI (SAME AS HAINES INDEX).....LOWER ATMOSPHERIC SEVERITY INDEX
                            MEASURES FIRE GROWTH POTENTIAL
   EXAMPLE: 1-3 = VERY LOW; 4 = LOW; 5 = MODERATE; 6 = HIGH
STABILITY.....STABILITY CLASS
   EXAMPLE: A = VERY UNSTABLE; B = MODERATELY UNSTABLE; C = SLIGHTLY UNSTABLE
           D = NEUTRAL; E = SLIGHTLY STABLE; F = MODERATELY STABLE
           G = VERY STABLE
STAG INDEX..... INDEX INDEX
    EXAMPLE: 0 = WINDS >= 10 MPH; 1 = WINDS <= 10 MPH WITH RAIN
           2 = DRY WITH DECENT WINDS
           3 = DRY WITH LIGHT WINDS AND STAGNATE CONDITIONS
WATCH/WARNING/ADVISORY...
   EXAMPLE: W = WARNING; Y = ADVISORY; A = WATCH
    IN EFFECT FOR THE INDICATED HOUR
DAY 4 THROUGH 7...
MAX/MIN TEMP OR MIN/MAX TEMP (F)....MAXIMUM/MINIMUM AIR TEMPERATURE
TEMP (F).....AIR TEMPERATURE
DEWPT (F) ..... DEW POINT TEMPERATURE
RH (%).....RELATIVE HUMIDITY
WIND DIR (8 POINT COMPASS).....20 FT. WIND DIRECTION
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AVE CLOUDS (CAT).....AVERAGE CLOUD COVER CATEGORY POP 12HR (%).....PROBABILITY FOR ACCUMULATING PRECIPITATION WEATHER... SEE DAY 1 THROUGH 3 WEATHER DESCRIPTIONS

## **B. SPECIAL METEOROLOGICAL SERVICES**

#### 1. ON-SITE SERVICES (IMET/ATMU)

The NWS will provide IMET/ATMU "on-site" support to federal land management agencies for wildfires and prescribed burns. All expenses are borne by the requesting agency. IMET/ATMU requests are made through the USFS Region 8 dispatch office in Atlanta, GA.

#### 2. OTHER SERVICES

NWS forecasters may be available for weather station visits and weather station site selection coordination.

#### C. TRAINING SERVICES

NWS meteorologists will be available to teach S290, S390, NFDRS, etc to land management agency employees. Requests are to be made in writing to:

Meteorologist-In-Charge National Weather Service Forecast Office 7777 Walnut Grove Road, Suite 1 Memphis, TN 38120

NWS meteorologists are also available for weather observer training and course development work.

Cooperating land management agencies will teach fire behavior and fuels to NWS forecasters.

#### **D. COMMUNICATION SERVICES**

The NWS will communicate fire weather information to cooperators. Channels to be used include NOAA Weather Radio, NOAA Weather Wire Service, telephone, fax, and the internet. The channel chosen will depend on the product being issued. Some WIMS messages will be transmitted only through NWS circuits.

#### 1. NOAA WEATHER RADIO (NWR)

There are several NOAA Weather Radio (NWR) stations in the Midsouth. They will be used to broadcast fire weather notification messages, fire weather watches, and red flag warnings. Information about each NOAA NWR station is on the NWS Memphis webpage at <a href="http://www.srh.noaa.gov/meg/nwr.htm">http://www.srh.noaa.gov/meg/nwr.htm</a>.

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#### 2. NOAA WEATHER WIRE SERVICE (NWWS)

NWWS is a dedicated NWS communication circuit that disseminates weather information directly to radio and television broadcasters or anyone else that subscribes to the circuit. Fire weather forecasts, fire weather notification messages, fire weather watches, red flag warnings, NFDRS forecasts, and fire weather point forecast matrices are put on this circuit.

# **3.** NWS MEMPHIS WEBPAGE (<u>http://www.srh.noaa.gov/meg</u> or http://midsouthweather.com)

The NWS will maintain a fire weather webpage for the Midsouth. The page will be the primary transmission method used to communicate fire weather information to cooperating agencies. This page will contain routine Midsouth fire weather products including fire weather planning forecasts, NFDRS forecasts, fire weather watches, red flag warnings, fire weather notification messages, and fire weather point forecast matrices. This webpage should also contain other types of weather information useful for fighting forest fires. Useful links to the following will be included:

- 1. 8 to 14 day weather outlooks
- 2. 30 day weather outlooks
- 3. 90 day weather outlooks
- 4. Haines index
- 5. Keetch-Byram Drought Index (KBDI)
- 6. NFDRS forecasts
- 7. RAWS observations

National Weather Service Office/Contacts

a. Memphis, Tennessee

Address - National Weather Service Forecast Office 7777 Walnut Grove Road , Suite 1 Memphis, TN 38120

Contacts – Michael Scotten, Fire Weather Focal Point Mr. James Belles, Meteorologist-in-Charge

Public Forecaster, Various meteorologists

Phone - (Administration) - (901) 544-0405

FAX - (901) 544-0414

email addresses - Michael.Scotten@noaa.gov

Jim.Belles@noaa.gov

Webpage - http://www.srh.noaa.gov/meg or http://midsouthweather.com

#### APPENDIX C. NATIONAL AGREEMENT

The national agreement between government agencies concerning fire weather services can be found at:

http://www.nws.noaa.gov/directives/sym/pd01004006curr.pdf