



MINUTES OF MEETING
Kent and Sussex County TMT Meeting
May 17, 2005
Carlisle of Milford Fire Hall



Date: May 26, 2005
Meeting Date: May 17, 2005
Location: Carlisle of Milford Fire Hall
Purpose: Kent and Sussex County Transportation Management Team (TMT) Meeting

List of Committee Members and Meeting Attendees:
See Attached Sheets

I. Opening Remarks

Glenn Gillespie (DEMA) opened the meeting with a brief introduction and thanked the Ladies Auxiliary and Carlisle Fire Department for catering and holding the event. Glenn introduced the presenter: Mr. Joe Miketta, Warning Coordination Meteorologist, of the National Weather Service - Mt. Holly, NJ.

II. Tropical Systems Presentation

Mr. Miketta began the presentation with an overview of the Weather Forecast Office in Mount Holly and the various tools and devices that NOAA uses to monitor weather. Joe referred to the Delaware Environmental Observing System (DEOS) website as a valuable resource (www.deos.udel.edu).

Mr. Miketta next discussed the various classifications of tropical storm systems and highlighted several important features.

- Tropical Depression – organized system with max sustained winds of 38 mph
- Tropical Storm – organized system with sustained winds between 39 and 73 mph
- Hurricane – organized system with sustained winds greater than 74 mph
 - Category 1 – 74 to 95 mph
 - Category 2 – 96 to 110 mph
 - Category 3 – 111 to 130 mph
 - Category 4 – 131 to 155 mph
 - Category 5 – greater than 156 mph
- Hurricane forecasts are for sustained winds – gusts are even stronger
- Water – the fuel for Tropical Systems

Joe explained the concept of storm surges, which is the rising of the sea level (not just large waves), and he emphasized the dangerous relationship between storm surges and inland flooding. As an example, Mr. Miketta presented the depth mapping of the storm surge that affected the Chesapeake Bay region during Hurricane Isabel. He also presented the storm surge maps for New Castle and Kent Counties developed by the Army Corps of Engineers for different category hurricanes. The majority of deaths during tropical systems are from inland flooding.

Mr. Miketta briefly discussed how tornados can develop in advance of tropical storms, and he presented photographs and wind speed graphics from the Wilmington Manor tornado in September 2004.



MINUTES OF MEETING
Kent and Sussex County TMT Meeting
May 17, 2005
Carlisle of Milford Fire Hall



Next, Joe presented several maps showing a historical perspective and the upcoming hurricane forecast for Delaware. Mr. Miketta stated that although hurricane landfall in Delaware is rare, the area is long overdue for a severe storm.

- Only one hurricane has passed within 25 miles of Delaware in the last 154 years – Hurricane Hazel (1954).
- Tropical storms affecting Delaware often occur (and have a higher probability to occur) in September and October because of the higher ocean temperatures.
- Hurricanes rarely hit north of Cape Hatteras because:
 - Most storms move northeast after latitude 35N
 - Cold water in the north weakens hurricanes
- However, some hurricanes approach from the south:
 - Over-the-water approach
 - Strong and long-lived storms coming from the deep tropics
 - Normally move faster (less time for cold water to weaken them)

Joe Miketta concluded the Tropical Systems presentation by telling the group to be prepared.

- Although they can be predicted, no one can stop the storms.
- Have a plan for bad weather
- Stay informed – monitor the weather by:
 - TV
 - Radio
 - Phone (609) 261-6600
 - Internet at www.nes.noaa.gov.er/phi
- Heed local law enforcement and emergency management officials
- Protect yourself

III. Tsunamis Presentation

Mr. Miketta began the presentation with several definitions and a basic overview of tsunamis.

- “Tsunami” is Japanese meaning “harbor wave”
- What is a Tsunami?
 - A series of waves of extremely long wavelength and long period generated in a body of water by an impulsive disturbance that displaces the water.
 - Even small tsunamis (water height of less than 3 feet) are associated with very strong currents capable of knocking people off their feet.
 - Tsunami waves can persist for many hours after the causative event.
 - NOT tidal waves...they have nothing to do with the tides!
- Difference between wind waves and tsunamis
 - Wind waves space between 5 to 20 seconds and have lengths up to 300 to 600 feet.
 - Tsunami waves space between 10 minutes to 2 hours and can have lengths greater than 300 miles.
- Possible causes of tsunamis
 - Undersea earthquake
 - Landslides (into or under the water)
 - Submarine volcanic activity
 - Oceanic Meteorite Impacts



MINUTES OF MEETING
Kent and Sussex County TMT Meeting
May 17, 2005
Carlisle of Milford Fire Hall



Joe presented several graphics that illustrated how tsunamis are created and what happens when tsunamis approach the coast.

- A tsunami may appear as a rapidly rising or falling tide, a series of breaking waves, or even a bore.
- Strong currents and debris carried by waves add to destructive nature of inundating flood.

Mr. Miketta briefly touched on the potential sources for tsunamis affecting Delaware. He stated that a disturbance off the Africa coast could lead to tsunamis impacting the US East Coast within 8-10 hours. Joe also provided a list of tsunami damage to the US West Coast over the past 200 years.

Next, Mr. Miketta presented photographs and video of the destruction from the Sumatra tsunamis on December 26, 2004. He pointed out that many of the people killed actually approached the ocean in amazement because of the extremely low sea level that preceded the tsunamis. He also presented a simulation showing how the energy from the Sumatra event impacted all of the continents.

Mr. Miketta concluded his presentation by discussing tsunami warning and detection. He displayed a map of proposed DART buoy locations in the Pacific and Atlantic Oceans, and he discussed public information dissemination through the US Coast Guard, National Weather Service, and commercial television and radio.

Mr. Miketta's takeaway points:

- Tsunamis impact the coastal zone.
- Coastal growth continues at a rapid pace. Vulnerability is increasing.
- There is/will be a National Tsunami Warning System for the Atlantic Basin.
- Probability-based forecasts for future tsunamis are not possible.
- Tsunamis will occur – although very rarely.
- The goal is to reduce loss of life from tsunamis.
- Leveraging existing program resources in all-hazards approach will save time, effort, and money.
- It is cheaper to anticipate than respond.
- Education and planning will help mitigate impact.
- For more information visit:
 - www.nws.noaa.gov/er/phi/reports/tsunami.htm or
 - <http://wcatwc.arh.noaa.gov>

IV. Next Meeting

The local TMT meetings will continue again in June.

- **Kent County TMT meeting – June 1, 7:00pm at the Kent 911 Center**
- **Western Sussex TMT meeting – June 2, 7:00pm at the Seaford Fire Co.**
- **Eastern Sussex TMT meeting – June 8, 7:00pm at the Lewes Fire Co.**
- **Central Sussex TMT meeting – June 15, 7:00pm at the Ellendale Fire Co.**

Any questions or concerns can be directed to Joe Miketta at Joseph.Miketta@noaa.gov or (609) 261-6602. Additionally, Edwards and Kelcey is providing consulting support and helping assist DeIDOT in coordinating the TMT efforts. Matt Buckley and Mike Domboski can be reached at mbuckley@ekmail.com / (610) 701-7000 and mdomboski@ekmail.com / (610) 701-7000, respectively.



MINUTES OF MEETING
Kent and Sussex County TMT Meeting
May 17, 2005
Carlisle of Milford Fire Hall



List of Meeting Attendees

Bracco	Robert	Civil Air Patrol	bobbracco@comcast.net
Briggs	Lewis	DSP – 911 Operations	Lewis.Briggs@state.de.us
Brown	Curtis	DSP – Troop 5 (Traffic)	curtis.brown@state.de.us
Butler	Doug	Seaford Fire Company	
Cannon	John	Bridgeville Fire Company	
Carey	Alan	DE Fire Police Assoc. (Pres.)	abctow8757722@yahoo.com
Clacher	Jim	DeIDOT/TMC	jim.clacher@state.de.us
Coulbourne	Tate	Citizens Hose of Smyrna Fire Company	
DeFord	Frank	Sussex Co. Fire Police Assoc. (Pres.)	
Dempsey	Dickie	Kent Center	dickie.dempsey@co.kent.de.us
Domboski	Mike	Edwards and Kelcey	mdomboski@ekmail.com
Donaldson	Gene	DeIDOT/TMC	gene.donaldson@state.de.us
Embert	John	Citizens Hose of Smyrna Fire Company	
Fantini	Maria	DeIDOT/Central District	maria.fantini@state.de.us
Faust	Patricia	DeIDOT/TMC	patricia.faust@state.de.us
Flores	Vincent	DE Dept. of Public Health	vincent.flores@state.de.us
Fountain	Brennon	Kent Co. Fire Chief's Assoc. (2nd Vice Pres.)	brennon.fountain@state.de.us
Hall	John	Sussex Co. Fire Police Assoc. (1st Vice Pres.) & Millsboro Fire Co.	johnhallde@aol.com
Hamilton	Andrew	Ellendale Fire Company & Wadkins Towing	aham75@comcast.net
Hughes	Randall	DSP – Operations	Randall.Hughes@state.de.us
Huttie	Joseph	DSP – Troop 3 (Traffic)	joseph.huttie@state.de.us
Kibler	Lawrence	Civil Air Patrol	lkibler20@comcast.net
Knowles	Warren	Civil Air Patrol	warren_knowles@hotmail.com
Lacurts	Mike	Sussex Co. Fire Chief's Assoc. (1st Vice Pres.)	
Lankford	Thomas	DeIDOT/Central District	tom.lankford@state.de.us
Marecki	Edward	DSP - KENTCOM (PSAP Manager)	Edward.Marecki@state.de.us
Marsh	Chris	DeIDOT/TMC	chris.marsh@state.de.us
Marvel	Rodney	DE Fire Chief's Assoc. (Pres.)	rmarvel@sussexcountyde.gov
Metheny, Jr.	Allen	Kent Co. Emergency Management	allenmetheny@yahoo.com
Moore, Jr.	Rowland	Ellendale Fire Company	
Rains	Mike	Kent Co. Fire Chief's Assoc. (Pres.)	mike.rains@state.de.us
Reynolds	Walt	Lewes Fire Company	Pastchief82@sisna.com
Toulson	Richard	DeIDOT/South District	richard.toulson@state.de.us
Turner	Robert	Civil Air Patrol	cappaode@wmconnect.com
Walius	Ted	DE Fire Chief's Assoc. (Sussex Director)	ellendale75@aol.com
Wallace	Lauren	Civil Air Patrol	lwal216904@aol.com
Ward	Dick	DE Fire Chief's Assoc. (Sussex Director)	richard.ward@state.de.us
Watson	Jim	DE Fire Chief's Assoc. (1st Vice Pres.)	kingshimr@aol.com
Willey	Roger	DSP – Troop 7 (Traffic)	roger.willey@state.de.us
Winstead	Timothy	DSP – Troop 4	Timothy.winstead@state.de.us