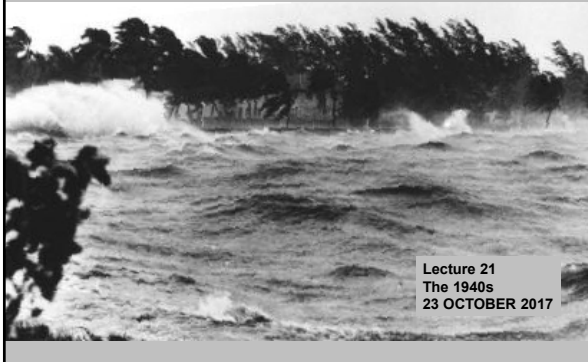
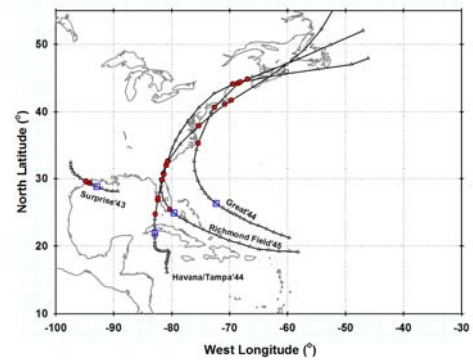


MET 4532



Lecture 21
The 1940s
23 OCTOBER 2017

Memorable Hurricanes of WW II



The Great Hurricane of '44

Cape Verde Hurricane, 9-16 SEP
Sank:
USS Warrenton
Coast Guard Cutters *Bedloe* & *Jackson*
Lightship *Vinyard Sound*
USS YMS 409
Drowned 356 mariners



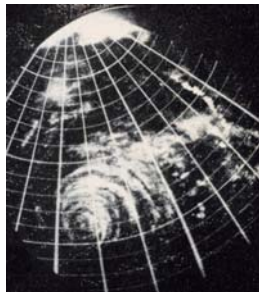
Great Hurricane's Impact on land



Landfall on Hatteras and in
New England as a CAT 3
Caused extensive
shoreline damage
Killed only 46 ashore,
compared with 356 at sea
First use of aircraft
reconnaissance

Scientific Advances during WW II

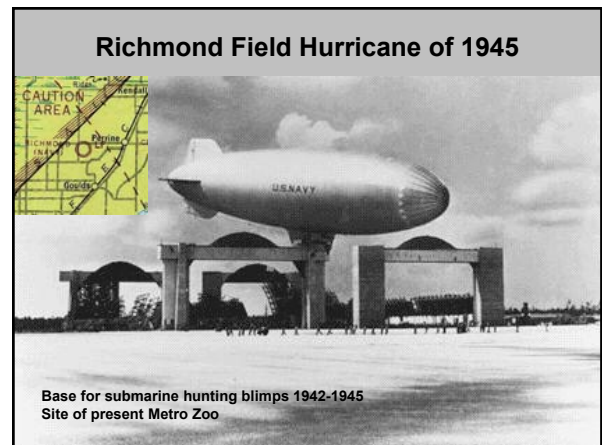
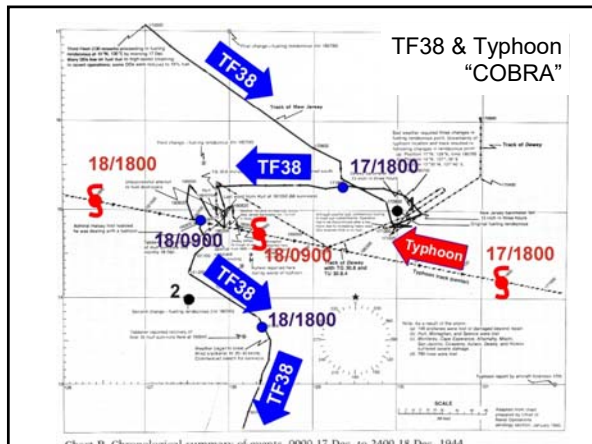
- NWS reports that aircraft reconnaissance reduced loss of life in the Great Hurricane of 1944
- Radar first used in Havana/Tampa Hurricane of 1944 (12-23 OCT)
 - First eye radiosonde from Tampa
 - Remembered as "The Big One" in Pinar del Rio & La Havana
 - Killed 310 in Cuba, but only 3 in US
 - Large eye, crossed the state from Sanibel to Jacksonville
- Expanded upper-air observations worldwide
- Herbert Riehl's founding of US Tropical Meteorology at Univ. of Chicago
- Former military & naval meteorologists enter the field



TF 38 and Typhoon "COBRA" of December 1944

- TF 38, Fast Carrier Force covering invasion of the Philippines
- Retired eastward to refuel and rearm
- Many ships low on fuel
 - Pumped water ballast
 - Free-surface effect
- Addition of anti-aircraft guns and radar increased topside weight and reduced stability.
- Kosco (CTF Met) thought N winds were from a cold front
- Thought Typhoon "COBRA" was far to the ESE based upon faulty aircraft reports and assessments from Fleet Weather
- COBRA actually passed about 30 nmi south of the fueling rendezvous point







Summary

- "Surprise" Hurricane of 1943 (25-29JUL) Hit Galveston, TX as a CAT 1 with little warning, first flight into a TC
- Great Hurricane of '44 (9-16SEP)
 - Cape Verde storm, replay of '38 storm
 - Affected Cape Hatteras and struck southern New England as CAT3
 - Sank 5 Navy & Coast Guard ships, drowning 356 sailors, but killed only 46 ashore... attributed to first use of aircraft reconnaissance
- Typhoon "COBRA" (17-18DEC44)
 - Hit US 3rd Fleet (TF38), under ADM Halsey
 - Refueling and rearming after Lete Gulf (Philippines) invasion
 - CFT Meteorologist interpreted N wind as cold front
 - Fleet steamed west then south into Typhoon's path
 - Three destroyers sunk, 790 sailors lost
 - Extensive damage to other ships, especially aircraft carriers
- Havana-Tampa (Pinar del Rio) Hurricane (12-23 OCT44)
 - Formed in Caribbean, passed over western Cuba to landfall near Sarasota
 - Devastating in Pinar del Rio and Havan provinces
 - First radar observation and first rawinsonde ascent in the eye
- Richmond Field: Destroyed by CAT3 hurricane 15SEP45. Site of present METRO ZOO

For Next Time
E: 182-193, 53