57th IHC ACTION ITEMS

1. Title: **Posting of Breakpoints on Internet**

   Submitter: NOAA

   Discussion: NOAA/NWS will post the "standard" breakpoints on the Internet prior to June 1, 2003. Posting will note there may be an occasion to use a location, not on the official list, as a breakpoint.

   Recommendation: Amend NHOP to carry Internet address.

   Action: **Accept recommendation.**

2. Title: **Changes in Tropical Cyclone Breakpoints**

   Submitter: NOAA

   Discussion: Pigeon Key, FL, is not a well known site and is very close to another break point, Seven Mile Bridge. Additionally there is another Pigeon Key near Key Largo. Pigeon Key breakpoint was deleted.

   The breakpoint Brunswick, GA, divides the city of Brunswick. Brunswick (Altamaha Sound) is used to include or exclude the city of Brunswick. Brunswick breakpoint deleted. Decision made to rename Brunswick (Altamaha) breakpoint to Altamaha Sound.

   The Pascagoula, Mississippi, breakpoint is about 8 miles west of the Alabama/Mississippi state line in extreme eastern Jackson County, Mississippi. When the breakpoint is used, it covers only a small section of Jackson County thus causing some confusion to the public yet it is a convenient breakpoint to insure watch/warning coverage for the entire Alabama coast. The emergency manager of Jackson County has expressed concern to WFO New Orleans/Baton Rouge regarding this issue. Decision made to keep Pascagoula breakpoint as a breakpoint and add "Mississippi/Alabama border" as a breakpoint.

   Recommendation: Amend NHOP to reflect these changes. Breakpoint file attached.

   Action: **Accept recommendation.**

3. Title: **Changes to NHOP, Appendix H and I**

Submitter: NOAA

Discussion: Appendix H *WSR-88D Operations Plan for Tropical Cyclone Events* and Appendix I *Telephone and Teletype Listing of the NHOP* need revision. Both of these will be updated and provided to OFCM by NOAA/NWS.

Recommendation: Amend NHOP when information received from NOAA/NWS.

Action: **Accept recommendation.**

4. Title: **Extension of Forecast to 5 Days**

Submitter: NOAA

Discussion: TPC and CPHC will begin issuing 5 day track and intensity forecasts. This will change the format of the TCD and TCM products and their descriptions in the NHOP.

Recommendation: Amend appropriate sections of NHOP to reflect these changes. Also forward to WMO RA IV. Examples of the TCM and TCD product are attached.

Action: **Accept recommendation.**

5. Title: **Deletion of Section A.1.7 in NHOP**

Submitter: NOAA

Discussion: There is no purpose for issuing a Special Weather Statement for probabilities.

Recommendation: Delete section A.1.7 of the NHOP.

Action: **Accept recommendation.**

6. Title: **Addition of Definition**

Submitter: NOAA

Discussion: Definition: Extratropical cyclone - a synoptic scale low pressure system whose primary energy source is baroclinic.

With approval closes 56th IHC Action Item #1.

Recommendation: Add to Appendix L - Glossary section of NHOP.

Action: **Accept recommendation.**

7. Title: **Addition of Product**

Submitter: NOAA

Discussion: The RSMC Miami – NHC and RSMC Honolulu - CPHC disseminates advisory information on positions of the center of tropical cyclones to meteorological watch offices in accordance with the International Civil Aviation Organization Air Navigation Plans. This tailored "aviation advisory message" is derived directly from the TCM product and is used for the preparation of OUTLOOKs appended to SIGMETs for tropical cyclones.

```
TC ADVISORY
DTG:                        20020923/0900Z
TCAC:                       KNHC
TC:                         ISIDORE
NR:                         029
PSN:                        N2024 W08948
MOV:                        SSW 04KT
C:                          0952HPA
MAX WIND:                   065KT
FCST PSN + 12 HR:           231800 N2018 W09036
FCST MAX WIND + 12 HR:      060KT
FCST PSN + 18 HR:           240000 N//// W/////
FCST MAX WIND + 18 HR:      ///KT
FCST PSN + 24 HR:           240600 N2112 W09142
FCST MAX WIND + 24 HR:      075KT
NXT MSG:                    20020923/1500Z
```

Recommendation: NOAA/NWS will provide OFCM further details. Add product to appropriate section of NHOP.

Action: **Accept recommendation.**

8. Title: **Replacement Names for Hurricanes Isidore and Lili and eastern Pacific Hurricane Kenna.**

Submitter: NOAA

Discussion: Because of the damage and deaths associated with Hurricanes Isidore, Lili, and Kenna, the World Meteorological Organization Regional Association-IV (WMO RA-IV) will likely request the names be retired.

Recommendation: The name Isidore be retired and suggest replacement names Irving, Icaro, or Ike. Recommend the name Lili be retired and suggest replacement names Lucy, Laura, or Lisette. Recommend the name Kenna be retired and suggest replacement names Karina, Katherin, or Kayla. IHC to forward suggestions to the RA-IV Hurricane Committee.

Action: **Accept recommendation.**

9. Title: **AFWA Proposed NHOP Changes**

Submitter: Air Force Weather Agency (AFWA)

Discussion: DMSP equator crossing in NHOP Table 6-2 should be changed to read:

- DMSP F-12, Type of Data For OLS and SSM /T-2 delete "recorded", add "only" after "direct"
- DMSP F-12, change local time to "0635D/1835A"
- DMSP F-13, change local time to "0620D/1820A
- DMSP F-14, change local time to "0805D/2005A
- DMSP F-15, change local time to "0930D/2130A"

Add Note: Times are accurate to +/- 5 minutes.

Page 6-6, Para 6.4.1, "**Air Force Support and the Defense Meteorological Satellite Program (DMSP)**," line 3 – after word "transmit" delete "twice daily teletype bulletins" replace with "four daily electronic text bulletins"

Appendix I, Page I-2, "**Telephone and Teletype Listing**," Agency column –replace telephone number for AFWA with COM 402-294-7264, and DSN 271-7264, Under AFWA add "Satellite Analyst"

Recommendation: Update NHOP

Action: **Accept recommendation.**

10. Title: **53 WRS Proposed NHOP Changes**

Submitter: 53 WRS/CARCAH

Discussion: The 53 WRS proposes the following NHOP changes:

- Page 2-4, Para 2.3, Third bullet: Change Appendix C to Appendix F.
  Reason: Correct error.

- Page 5-5, Para. 5.4.3: Last word "mission" is misspelled.
  Reason: Corrects typo.

- Page 5-6, Table 5-1, RECCO column, Fix row. The second sentence should be a separate paragraph.
  Reason: General editing.

- Page 5-7, Para 5.5.1.3: Change 3rd arrow under 1st bullet to "Up to two synoptic surveillance missions per 24-hour period for potential landfalling storms." *Note: The 53 WRS does not view this as a change to current requirements. The 53 WRS will be still held to 5 sorties per day.*
  Reason: Reflects recent tasking trends of NHC.

- Page 5-10, Table 5-2, B (BRAVO) explanation, 3rd line. Add "FL" before the word center and change "item QUEBEC" to "Remarks".

- Page 5-11, Table 5-2, J (JULIET) explanation, 4th line. Change "item QUEBEC" to "Remarks".
  Reason: Clarification and generalizes it to preclude future changes.

- Page 5-13, Figure 5-6: On WC-130H Supplementary Vortex Data Message, tenth line of data: it says "OBS 09 AT" .....It should be "OB 07 AT 1810"
  Reason: Correct error.

- Page 5-14, Figure 5-7, Item II. Delete "CENTRAL".
  Reason: Allows Eastern and Central Pacific requirements to be contained in section II.

- Page 5-14, Figure 5-7 Under Part III, delete item C, and rename part D as Item C.
  Reason: Privacy Act concerns.

- Page 5-16, Para 5.5.3.1 Second bullet: in first sentence delete "and

research missions." Second sentence should read: Research missions will be listed in remarks when available by transmission time.
Reason: Information about research missions can only be published when available.

- Page 5-19, Para. 5.6.1.1, MISSED bullet. This MISSED bullet should replace the MISSED bullet in paragraph 5.6.1.2. The 5.6.1.1 MISSED bullet should read "Data are not obtained within the parameters specified for on-time, early or late."
  Reason: Corrects editing error. The MISSED bullet change was put in the wrong paragraph.

- Page 5-23, Para 5.7.7: On example, change the 01XXA to 01BBA . Also delete the NNNN.
  Reason: To correct to the current procedure of sequencingthe two letter identifier. NNNN no longer required.

- Appendix I-3: All phone numbers need to be checked for accuracy.
  Reason: Houston numbers did not work when we needed them.

- Page 5-25, Para 5.8.4, last line. Replace "paragraph 5.4.5.4." with "Table 5-1."
  Reason: Paragraph 5.4.5.4 was deleted.

Recommendation: Amend NHOP to reflect changes.

Action: **Accept recommendation.**

56TH IHC OPEN ACTION ITEMS

3. Title: **Designation of Tropical and Subtropical Cyclones**

Submitter: NOAA

Discussion: We recommend a single list of names and numbers be used for all tropical or subtropical cyclones. That is, the second cyclone of the season (whether tropical or subtropical) would be given the number "Two" as a depression, and would take the next available name if it acquired winds of 34 kt or greater. For example, Subtropical Depression Thirteen strengthens and becomes Subtropical Storm Melvin. The NWS has adopted this recommendation. The following will appear in the NWS Tropical Cyclone operations manual.

Numbering and Naming Tropical and Subtropical Cyclones.

- Numbering and Naming Tropical Cyclones. Tropical Cyclone Centers will number tropical depressions in their areas of responsibility. Number tropical depressions consecutively beginning each season with the spelled out number "ONE." In the Pacific, for ease in differentiation, tropical depression numbers, assigned by NHC or CPHC, will include the suffix "E" (for eastern) or "C," (for central) respectively, after the number. In both the Atlantic and Pacific, once the depression reaches tropical storm intensity, name it and drop the depression number. The depression number will not be used again until the following year. Give tropical cyclones a name in the first advisory after intensifying to 34 knots (39 mph) or greater.

  The following rules apply for tropical cyclones passing from basin to another (with one exception noted below): Retain the name if a tropical cyclone passes from one basin into another basin as a tropical cyclone, i.e. advisories are continuous. An unnamed tropical depression will also retain its number (e.g. Tropical Depression Six-E remains Tropical Depression Six-E) if it crosses into another basin. There is an exception, for unnamed tropical depressions moving from west to east across 180, CPHC will assign a central Pacific depression number.

  Within a basin, if the remnant of a tropical cyclone redevelops into a tropical cyclone, it is assigned its original number or name. If the remnants of a former tropical cyclone regenerate in a new basin, the regenerated tropical cyclone will be given a new designation.

- Numbering and Naming Subtropical Storms. A single list of numbers and names will be used for all tropical and subtropical cyclones.

Therefore, numbering of subtropical depressions will follow the same procedure as tropical depressions. For example, if the first subtropical depression follows the first tropical depression, the subtropical depression will be given the designation Subtropical Depression Two. If a subtropical depression becomes a subtropical storm, it receives the next available name in the tropical cyclone naming sequence.

Recommendation: Amend Section 3.3 of the NHOP to reflect this change.

Action: **Further coordination with the NWS Pacific Region is needed before the recommendation is adopted.**

12. Title: **Damage Estimates for Tropical Cyclones**

Submitter: TPC, FEMA

Discussion: One of the most important statistics of a tropical cyclone is non-meteorological: the amount of damage caused. TPC regularly includes damage estimates in its Tropical Cyclone Reports. Little expertise resides within TPC for the generation of these estimates, which are usually obtained by doubling the amount of insured damage reported by insurance industry groups. TPC estimates may differ significantly from those of other agencies (e.g. Allison), which produces an inconsistent message to the media and the general public.

FEMA has considerable experience in estimating the various costs associated with natural disasters. Some of these are "direct", such as damage due to wind, rain, storm surge, etc. (both insured and uninsured), while other costs (such as lost sales or other economic impact, or expenses associated with agencies' responses to tropical cyclones) are not typically included in TPC damage estimates.

Recommendation: That FEMA provide TPC with preliminary and updated estimates of the direct costs associated with U.S. tropical cyclone events. For consistency, TPC would use the FEMA figures in its reports.

Action: **Accept recommendation. (OPR: John Murray/FEMA)**

55TH IHC OPEN ACTION ITEMS

7. Title: **Standardize wind radii designation between NWS and DOD**

Submitter: NOAA

Discussion: In NWS tropical cyclone products for the Atlantic, East Pacific and Central Pacific basins, the current and forecast radii of 34-knot and 64-knot winds are given by quadrant. DOD tropical cyclone products use the radius of 35-knot and 65-knot winds for basins under their responsibility.

Recommendation: Have DOD change their radii designation from 35- and 65-knots to 34- and 64-knots to conform to WMO standards.

Action: **ATCF being updated to support recommended change.**

11. Title: **RVSM Implementation – Effects on WC-130 Operations**

Submitter: 53 WRS

Discussion: Reduced Vertical Separation Minimums (RVSM) allows air traffic control agencies to put more aircraft in a given space by reducing the vertical separation to 1,000 feet, vice the former 2,000 feet. Aircraft requesting clearance to fly in RVSM airspace must meet certification standards for certain equipment as well as crew training, or receive special permission (e.g., an altitude reservation/ALTRV). ATC must separate RVSM-equipped from non-equipped aircraft by 2,000 feet; this places an increased workload on ATC, basically nullifying the benefits they should derive from RVSM implementation.

Presently, WSOP missions are the only flights that operate in RVSM airspace. NHOP missions *could* be impacted, if high altitude synoptic flights are requested.

RVSM is presently implemented in the North Atlantic and the Pacific Oceans, and will extend to the South Atlantic/Caribbean areas in November 2001. Plans are underway for implementation in the Gulf of Mexico (an increasingly high traffic area) within a very few years.

WC-130H aircraft are not, and will likely never be RVSM-equipped. So far, the FAA has been extremely helpful, and worked in close concert with 53 WRS Airspace Managers in order to meet 53 WRS

mission requirements. WSOP missions have either received ALTRVs, or the affected ARTCC has moved civil traffic to accommodate WX recon requirements.

WC-130J aircraft may currently meet RVSM equipment requirements, but are not certified. Certification is an expensive process, and the DoD certification schedule for "Js" is years away.

53 WRS is exploring the feasibility of requesting separate, early certification for the 53rd's ten J-models.

Recommendation: NHC and NCEP prepare a joint Statement of Need, outlining the (future?) requirement for high altitude (300 mb and above) surveillance, including value lost if the requirement is not met.

Action: **Accept recommendation.**