Progress for Development and Implementation of NHC/JHT Products in ATCF Buck Sampson, PI October 20, 2005

** Indicates completed or installed for evaluation

Year 1 (2005)

Task 1: **A wind radii CLIPER algorithm evaluation

Start: Spring 2005 End: October 2005 Deliverable: Report

Task 2: **A dialog from which to run the Monte Carlo wind probabilities

Start: Spring 2005 End: May 2006 Deliverable: Code

Task 3: Code to retain**, display** and evaluate forecast tack uncertainties

Start: April 2005 End: May 2006

Deliverable: Code, report

Task 4: Code that addresses new NHC/JHT requirements from the ATCF Requirements Meeting in November

Start: Spring 2005 End: July 2005 Deliverable: Code

List of 2004 ATCF Requirements Meeting tasks addressed for 2005 upgrade:

- 1) ** "none" selection of Center/Intensity type for A/C and Synoptic fix dialogs
- 2) ** When entering an ODT intensity fix, a position should not be required
- 3) ** Output comments associated with a/c fixes in the fix list
- 4) ** Default for a 90s storm should be DB rather than TD. Applies to Rebest and Start A Storm
- 5) ** Develop error bounds checking on 34, 50 and 64 kt wind radii. Applies to Edit Best Track, Re-Best, and Compute dialog.
- 6) ** Editing best track merge problem. Related to missing 34 kt wind radii
- 7) ** Improve the listing of the best track to 1 line per best track record
- 8) ** Display forecast guidance out to 7 days
- 9) ** Add button to display objective aids dialog that clears objective aids
- 10) ** Add zoom/un-zoom/full map buttons to forecast track dialog to allow for quick zoom/un-zoom over guidance when making a forecast track

------ Added Oct 2005 ------

- 11) ** Develop tool to plot objective and best track wind radii vs time with forecast/best track intensity information displayed
- 12) ** Changed nhc advisory to disable the radii edit boxes for tau's greater than or equal to 96
- 13) ** Worked on Jim's tc position estimate and tc update message handling
- 14) ** More work on nhc advisory, geography reference handling
- 15) ** Implemented dots on time/intensity and time/radii official line when invoked from forecast dialog
- 16) ** Revived fix conversion code for Chris
- 17) ** Modified Advisory Storm State dialog to make list boxes longer and change the fcst type line in the .adv file
- 18) ** Modified checkfdeck to add verbose/concise option for Chris, added extra output for Chris, output entire fix line
- 19) ** nhc advisory code, if a special is made, replace the current official forecast in adeck with the same forecast and change the techname to the center_old name. The new special forecast becomes the new OFCL for that dtg
- 20) ** Added Dissipated choice to the storm state dialog and added extra tau to the tau listbox
- 21) ** Fixed a problem with an ungraceful failure of the 4 panel script
- 22) ** Added option in preferences to display colors based on Saffir-Simpson scale. Added colors to the color preferences dialog
- 23) ** modified the objective aids to display out to 10 days (vice 7) and plot out to 5 days as solid, 10 days as dashed lines
- 24) ** Capability to rebest the wind radii directly from the wind radii vs time graph
- 25) ** Capability to eliminate EX, TD, DB, XX from objective aid verification
- 26) ** Ability to compute statistics by fix site
- 27) ** Expanded options for the display of wind radii and intensities, allow selection of single or multiple DTGs and single or multiple wind radii.
- 28) ** Put development level in bogus
- 29) * * Change defaults in rebest to use old development level if special type (e.g, XT)