



Instructions—Forecast Specialists

As Forecast Specialists, you will:

- Convert internal wind speeds from knots to miles per hour.
- Categorize storms according to the Saffir-Simpson Hurricane Wind Scale.
- If the storm develops from a tropical depression into a tropical storm, assign the appropriate name from the National Hurricane Center table and announce the name you have chosen to all teams
- Analyze air pressure and wind speed data using graphs.

For each advisory (ADV) that is received:

1) Convert internal wind speeds from knots to miles per hour.

Knots \times 1.15 = miles per hour (mph)

Example:

35 knots = ? miles per hour

$35 \times 1.15 = 40.25$ miles per hour

- ▶ Record the internal wind speed on your data worksheet in both knots and miles per hour (mph).

2) Classify the storm according to the classification tables and the Saffir-Simpson Hurricane Wind Scale (see tracking map and reference guide materials).

- ▶ Record the category of the storm on your data worksheet or indicate if it is a tropical depression or storm.

3) If the storm develops from a tropical depression into a tropical storm, assign the appropriate name from the Atlantic Name Table. Determine the most recently named hurricane in the Atlantic and then use the table to assign the next name on the list.

4) Report storm name to all teams.

5) Graph air pressure (mb) vs. time (hrs.).

6) Graph wind speed (mph) vs. time (hrs.).

7) Interpret both graphs.

As you plot the data for each advisory, think about the relationship between air pressure and the storm's wind speed. As Forecast Specialists, you may be asked if you think the storm will gain in strength. Consult with your team and use your graph analysis of air pressure and wind speed to be ready with an answer for the Mission Commander.

8) Consult with the Lead Meteorologist if you would like to report significant changes in the storm or if the classification changes.

9) Repeat steps 1-8 for each new advisory (ADV).



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