Instructions—ETA Advisors

As ETA Advisors, you will:

- Plot tropical storms on tracking maps.
- Measure the distance to breakpoint areas.
- Calculate the estimated time of arrival to each breakpoint area.
- Issue weather watches, warnings, and advisories to the Lead Meteorologist on your team.
- Analyze possible storm surge strength and consequences.

1) Plot tropical storms on tracking maps.

You will receive downloaded satellite tracking data on your team computer at timed intervals. On your storm tracking map locate the number of degrees latitude for the advisory, find the longitude line for the correct degree reading, and follow the lines toward each other until they intersect. Place a colored pencil dot to mark the spot. This will be the coordinate point for the location of the storm at the given advisory.

2) Determine the breakpoint areas for each advisory (ADV). Consult with your Zone Predictors or check the data worksheet for these areas.

3) Measure the distance from the plot of your current advisory (ADV) to each of these breakpoint areas using your compass (or ruler) and the scale on your tracking map. Document these distances on your data worksheet.

4) Calculate the estimated time of arrival (ETA) to each breakpoint area.

To calculate the estimated time of arrival, divide the distance to a breakpoint area by the current directional speed of the storm provided by the Zone Predictors.

$$\text{ETA} = \frac{\text{distance to breakpoint area (in miles)}}{\text{current directional speed (in mph)}}$$

For example, if a storm is traveling at 26 mph and is located 320 miles from a breakpoint area, the ETA calculation is:

$$\frac{\text{320 miles from breakpoint area}}{\text{26 mph (current directional speed)}} = \text{12.3 hours ETA}$$

An ETA of 12.3 hours indicates that the storm will hit the breakpoint area in 12.3 hours IF the storm continues to travel at a speed of 26 mph.

- Record the ETA (estimated time of arrival) on your data worksheet for each of the three breakpoint areas.

5) Issue hurricane weather watches and warnings and report possible storm surge strengths to the Lead Meteorologist on your team.

- See tracking map and other reference guides for information on when to issue these advisories.
- List the watches, warnings, and advisories on your data worksheet and report this information to your Lead Meteorologist.

6) Repeat steps 1-5 for each new advisory.