

NATIONAL WEATHER SERVICE
PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)

TYPE: *Experimental Product*

DATE: *August, 19 2004*

Experimental Tactical Decision Aid

Part 1 – Mission Connection

- 1. Product Description:** The Tactical Decision Aid (TDA) web page for the Terminal Radar Approach Controller (TRACON) highlights forecasts of thunderstorm potential for the TRACON's aircraft arrival corner posts. These forecasts will be updated hourly during periods of convective weather (occurring or forecast) and every four hours during periods of no convective weather. Forecasts will cover a 4 hour time frame. Forecast output will be a color-coded, bar graph indicating the hourly probability of thunderstorm activity at each corner post during the upcoming 4 hour period.
- 2. Purpose/Intended Use:** Weather support for the approach phases of flight is not addressed in the current suite of NWS aviation products. Recently, the FAA has expressed a strong desire for this type of forecast service. This TDA will enable traffic managers and controllers to develop and coordinate tactical decisions based on forecasts of convective weather at arrival corner posts, thus ensuring the safe and efficient flow of aircraft through the TRACON's airspace.
- 3. Audience:** The intended audiences are TRACONS, and the Air Route Traffic Control Center (ARTCC), including the Traffic Management Units at each facility served by the CWSU.
- 4. Presentation Format:** Interaction with the various FAA facilities will occur via an Internet web page. Forecast graphics are created via a Visual Basic program by meteorologists at the Center Weather Service Unit. Data is displayed in a color-coded bar graph. Green indicates no thunderstorm activity; yellow indicates a 30-50% chance of thunderstorms, and red indicates a 60% or greater chance of thunderstorms. Each of the four corner posts will have a 4 hour, color-coded, bar graph at one hour increments.
- 5. Feedback Method:** We solicit feedback through conversations and outreach with the TRACONS (phone calls or e-mail) to:
253-351-3741 or john.werth @noaa.gov

Part 2 – Technical

1. **Format and Science Basis:** This product was developed to provide TRACONS an easy method of obtaining forecasts of thunderstorm potential for their respective aircraft arrival corner posts. The web page graphics are created by the forecaster via a Visual Basic program. Standard convective forecasts techniques are employed.
2. **Availability:** Initially the TDA is available from 5 am to 9 pm daily (Auburn CWSU operating hours). The web page is updated a minimum of four times a day, and hourly when thunderstorms are forecast or occurring in the corner post areas.
3. **Additional Information:** Forecast output from this experimental product is not intended to substitute for any official, mission-critical forecast or warning issued by the National Weather Service. Rather it is intended to allow traffic managers and controllers to coordinate aircraft arrival operations based on weather impacts within the TRACON area. It also serves to promote safe and efficient flow of aircraft within the national airspace.