

UAV TECH -- TRACE SETUPS:

1. HOLISTIC FLIGHT PERFORMANCE

- a. RC Rates
- b. Debug Modes
- c. Gyros
- d. PID Error
- e. P-term
- f. I-term
- g. D-term
- h. Motors

2. PID OPERATIONS

- a. RC Commands
- b. Gyro + PID Roll
- c. Gyro + PID Pitch
- d. Gyro + PID Yaw
- e. PID Sums

3. PROP WASH EVAL.

- a. Error + P/D Roll
- b. Error + P/D Pitch
- c. PID Sums

4. SAND BOX / PLAYGROUND
(CUSTOM AND CHANGING)
5. SAND BOX / PLAYGROUND
(CUTOM AND CHANGING)
6. SAND BOX / PLAYGROUND
(CUTOM AND CHANGING)

7. YAW EVALUATION

- a. PID Error
- b. Gyro + PID Yaw
- c. PID Sum Yaw

8. PITCH EVALUATION

- a. PID Error
- b. Gyro + PID Yaw
- c. PID Sum Yaw

9. ROLL EVALUATION

- a. PID Error
- b. Gyro + PID Yaw
- c. PID Sum Yaw

0. NOISE ANALYSIS

- a. Roll Noise
- b. Pitch Noise
- c. Yaw Noise
- d. P-term Noise
- e. D-term Noise

Hidden BBE Commands:

1. Alt + ← or → arrows moves one sample at a time
2. Shift + ← or → arrows changes view scale in 10% increments

3. Alt + Click a trace (in legend) → turns on grid lines
4. Alt + [click a trace group] → splits the traces into individual lines

5. Alt + Mouse Roller over a trace (in legend) → changes Expo.
6. Ctrl + Mouse Roller over a trace (in legend) → changes Smoothing
7. Shift + Mouse Roller over a trace (in legend) → changes Zoom

Blackbox trace following tips:

- Roll: trace to positive (above dashed line) is to the RIGHT (below is to the LEFT)
- Pitch trace to positive (above dashed line) is to the FRONT (below is to the BACK)
- Yaw: trace to positive (above dashed line) is to the LEFT (below is to the RIGHT)

JB's PID Turning 101:

<https://www.youtube.com/watch?v=ehyXLsvaEhw>