

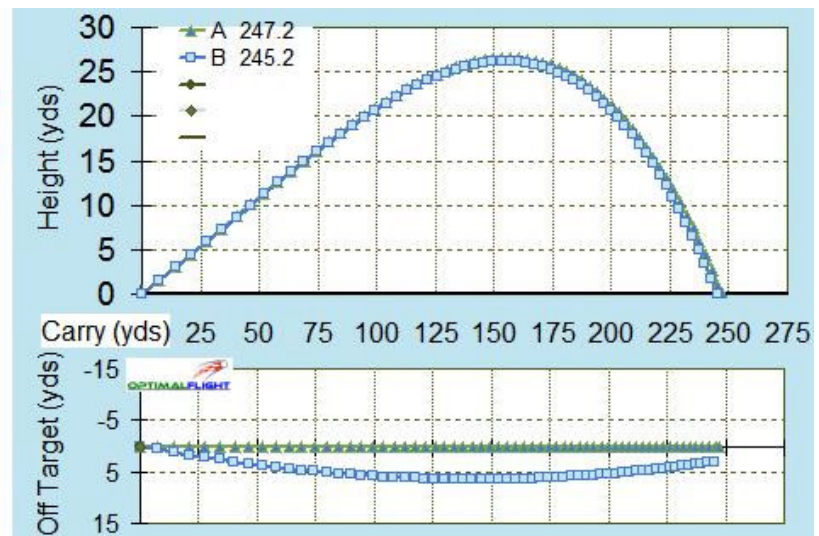
**Document Summary:**

This document contains step-by-steps to better understand the Flight Control Panel and how it can be used.

Set up Steps:

1. Enter 150 mph ball speed, 12 launch angle, and 2500 RPM of spin. Click Hit ball. This shot will be our baseline.
2. Click on the Flight Control Panel Button.
3. **The Flight Control Panel** will open up an array of environmental factors that can be applied to the ball flight. It will also open up the measurement units conversion panel, permitting OptimalFlight results to be converted from Yards to meters or MPH & meters.

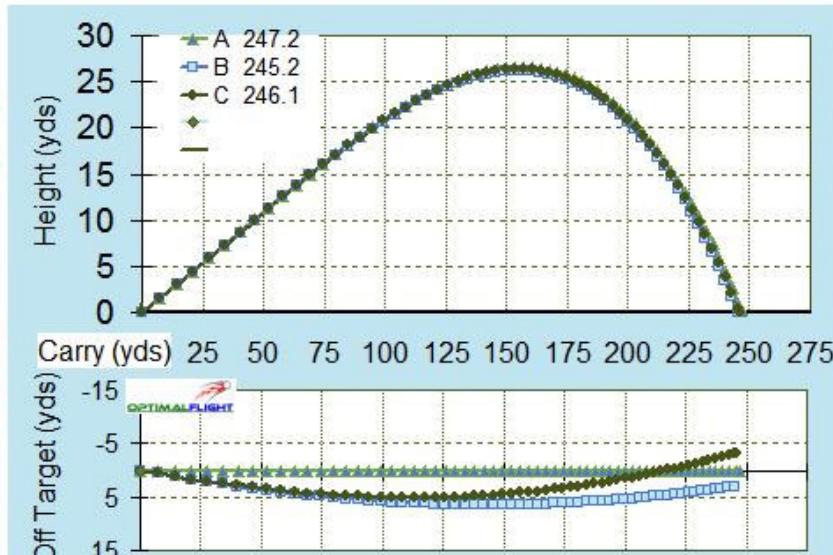
4. Any values set here can be applied globally to all shots by clicking the "HIT ALL BALLS" button or individually by clicking the "HIT BALL" button.
5. Duplicate launch conditions of Flight A to Flight B. Enter 5\* push with -500 rpm sidespin and observe the effect it has on the shot. The Top View will show that the ball goes right of target and draws back.



6. Now let's explore a WHAT-IF scenario of applying WIND and explore the effect of a 5 and 10 mph left to right cross winds.
  - a. Duplicate Flight B to Flight C.
  - b. In Flight Control Panel, enter 5mph for wind.
  - c. Choose 90° or use the compass as an aid to indicate the source of wind to the top view picture.

Flight Conditions:

Pull or Push °: +5.0  
 CLEAR  
 Draw SIDESPIN: -500  
 WIND (mph): 5.0  
 WIND Angle: 90  
 WIND INFO CLEAR



Note: Off target data is in two locations.

Legend for Off Target (yds):  
 A: +3.1, 245.2  
 B: -3.2, 246.1

- The more wind, the bigger the wind arrow is shown. In this example, the wind direction is coming from the R (or RIGHT SIDE) of fairway. T stands for Tailwind. H stands for Headwind. L stands for left to right cross wind.

- d. The Flight C information is also updated with appropriate visual feedback describing what is happening to the shot. It tells us we're at Sea Level, with 5mph right to left cross wind. The carry result is -3.2 yards left of target.

5\* Push with -500 from SS and Wind CLEAR

C

150.0 ClubSpd  
 12 Push/Pull 5  
 2,500 SideSpin -500

HIT BALL  
 246.1 -3.2 271.2

6.02, Wind: +5.0, Sea Lvl  
 32.9 25.1 26.4

90° Wind

7. As a last step for Flight D, let's re-visit the launch conditions in the Mile High altitude area of Denver, Colorado. (note: 1 mile = 5280 feet ).
  - a. Duplicate the launch conditions for Flight C to D.
  - b. Enter **6,000** feet for altitude and click the Flight D's HIT BALL button .
    - If the HIT ALL BALLS button was clicked, these environment factors would be applied to all shots.

ALTIMETER (ft)  
 CLEAR

- c. The Flight Control Panel settings can affect all shots. If you'd like to save this report and preserve the information exactly as shown, be sure to clear out the flight control panel data by clicking the CLEAR buttons so that these 'global' parameters are not applied to all shots when reloaded. When done, then save report to your database by clicking "SAVE as NEW REPORT" button.

Flight C condition CLEAR  
 plus 6000 ft

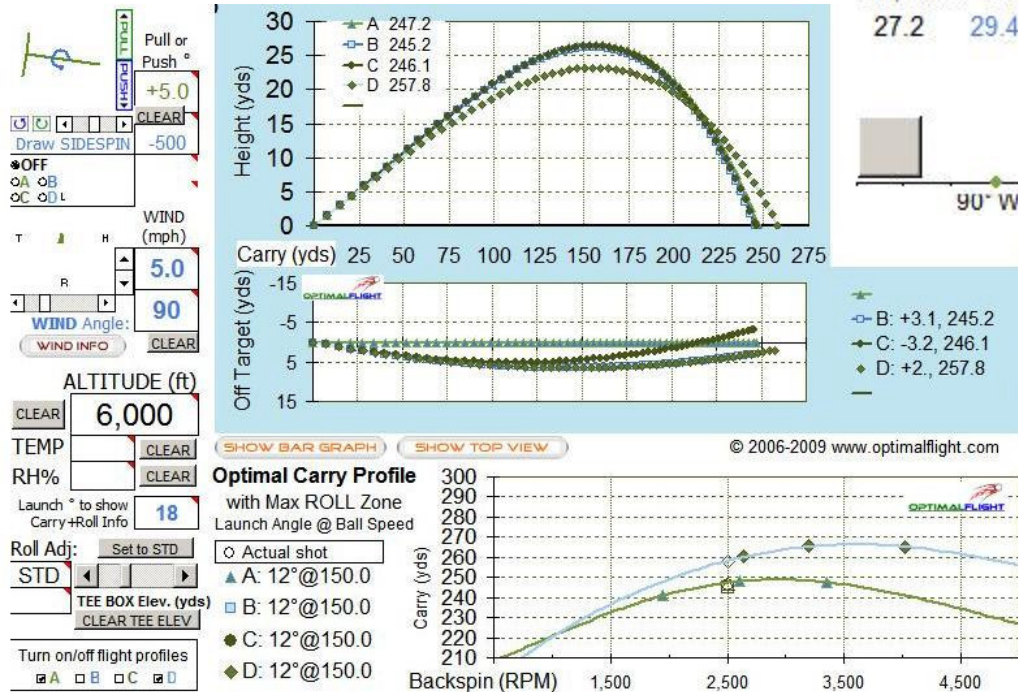
**D**

150.0 ClubSpd  
 12 Push/Pul 5  
 2,500 SideSpin -500

HIT BALL  
 257.8 +2.0  
 287.3

5.6, Wind: +5.0, Alt: 6,000  
 27.2 29.4 23.2

90° Wind



	CURRENT	OPTIMAL	+/-	A	CURRENT	OPTIMAL	+/-	B	CURRENT	OPTIMAL	+/-	C	CURRENT	OPTIMAL	+/-	D
Total Distance & FLIGHT #:	272.4	271.9		A	270.3	269.9		B	271.2	271.1		C	287.3	292.9		D
Carry (yds)	247.2	248.0	1		245.2	246.1	1		246.1	247.0	1		257.8	265.9	8	
ROLL:	25.1	23.9	-1		25.1	23.8	-1		25.1	24.1	-1		29.4	27.0	-2	
SPIN:	2,500	2,650	+150		2,500	2,690	+190		2,500	2,690	+190		2,500	3,320	+820	
OPTIMAL Distance Zone:	YES	2002-3298			YES	2088-3292			YES	2089-3291			NO	2760-3880		

- d. Review the results for the SIDE view and changes in the Optimal Carry Profile graph.
  - Is the ball flight optimized for Flight D?
  - Review what happened to the ball flight at 6000 feet with 5mph cross wind. Did we get more distance? Is it off target on the left or right side of target?
  - Why would we get a straighter shot at 6,000 feet?
  - What would you recommend for a driver change to produce more optimal flight?