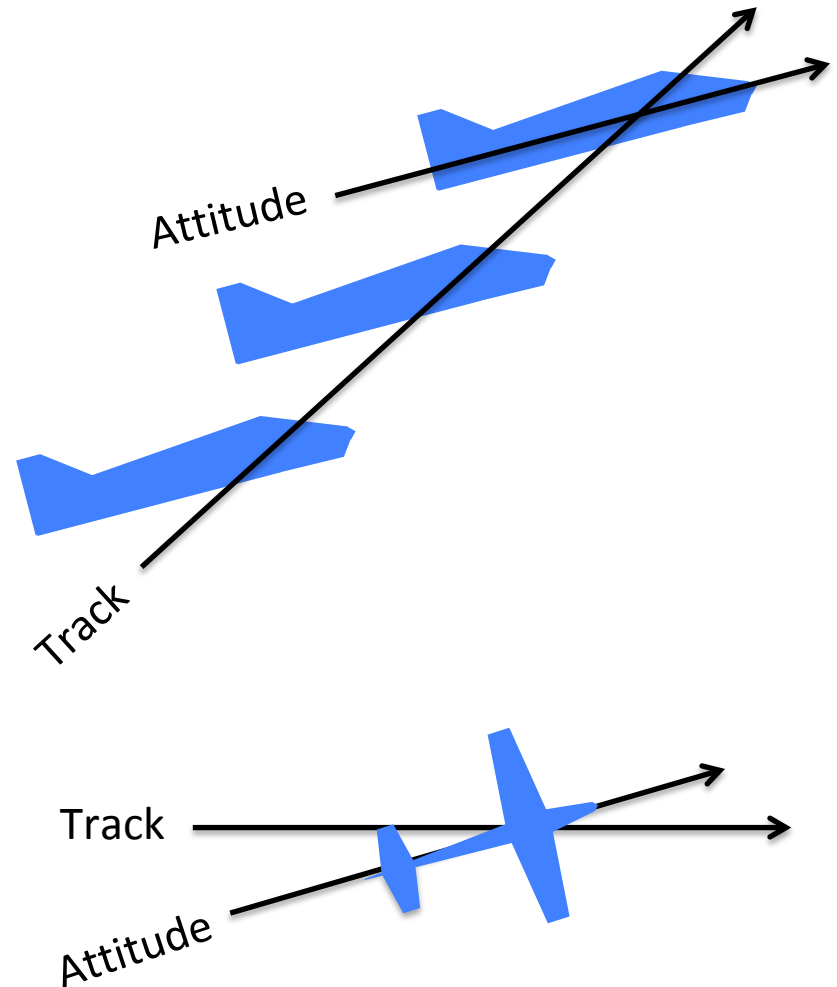


Wind Compensation

- Main Ideas
 - Adjusting attitude to maintain track
 - Increasing/decreasing attitude for speed changes
 - Rolling the wing

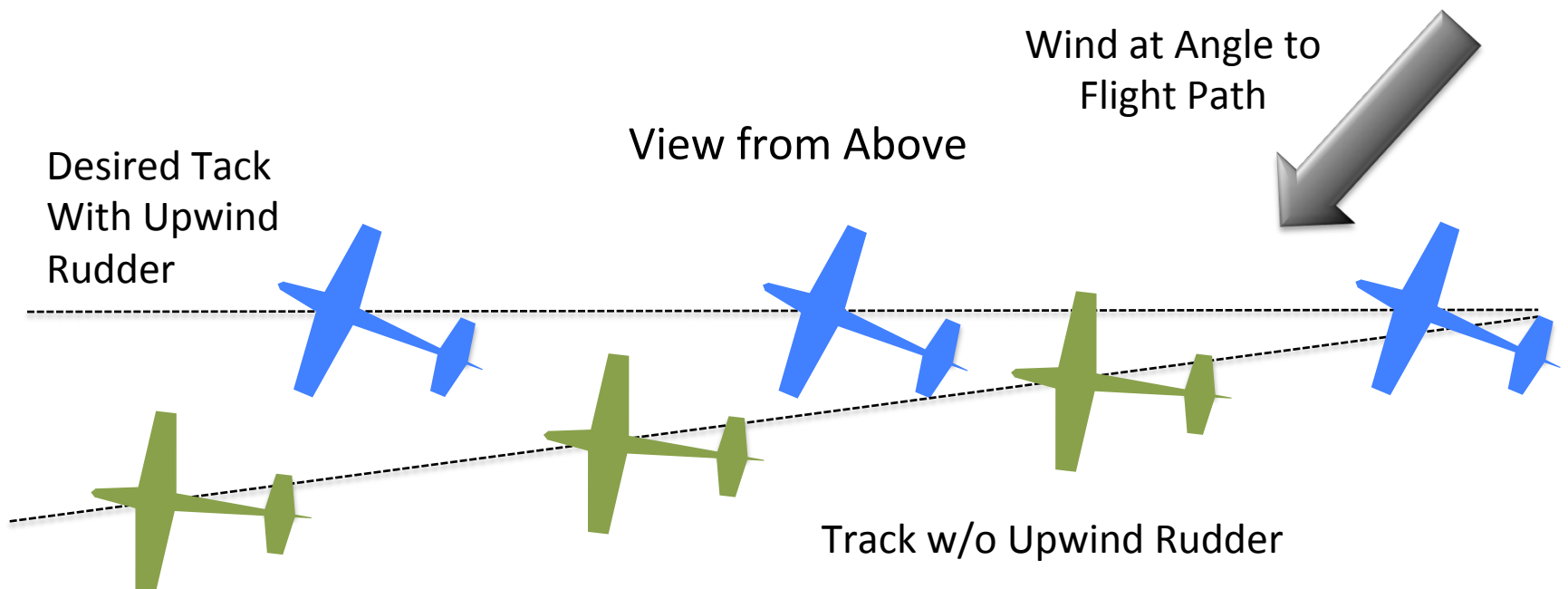
Attitude vs. Track

- Scoring is based on the track of the aircraft
- With no wind, track and attitude are the same
- With wind, the attitude of the aircraft must be continually adjusted to compensate for the effects of wind and speed changes





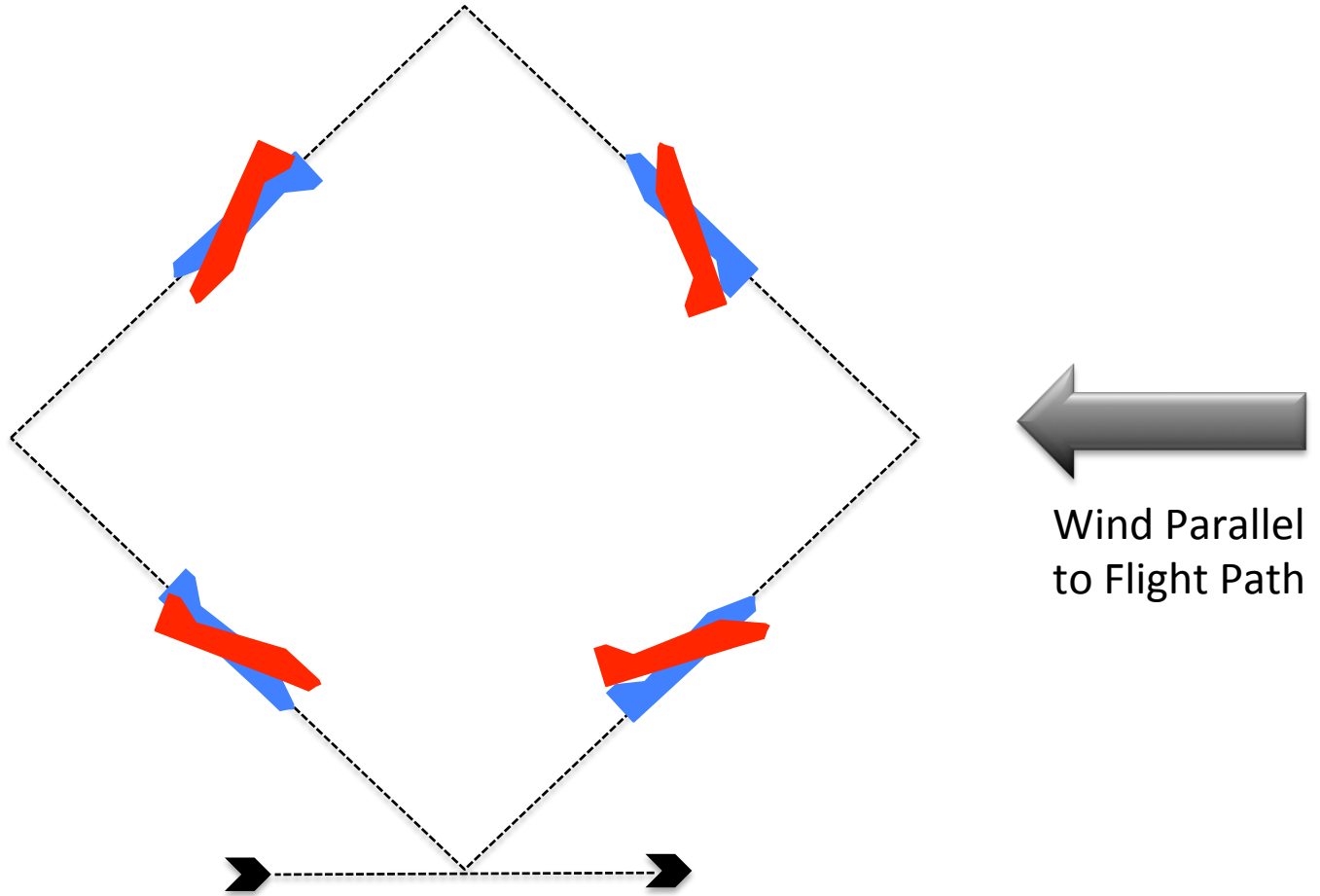
Yaw in a Crosswind

- Aircraft will yaw into a cross-wind without input
- In many situations, some upwind rudder needs to be held, continuously or intermittently, to maintain track



Lines

No Wind 
Wind 

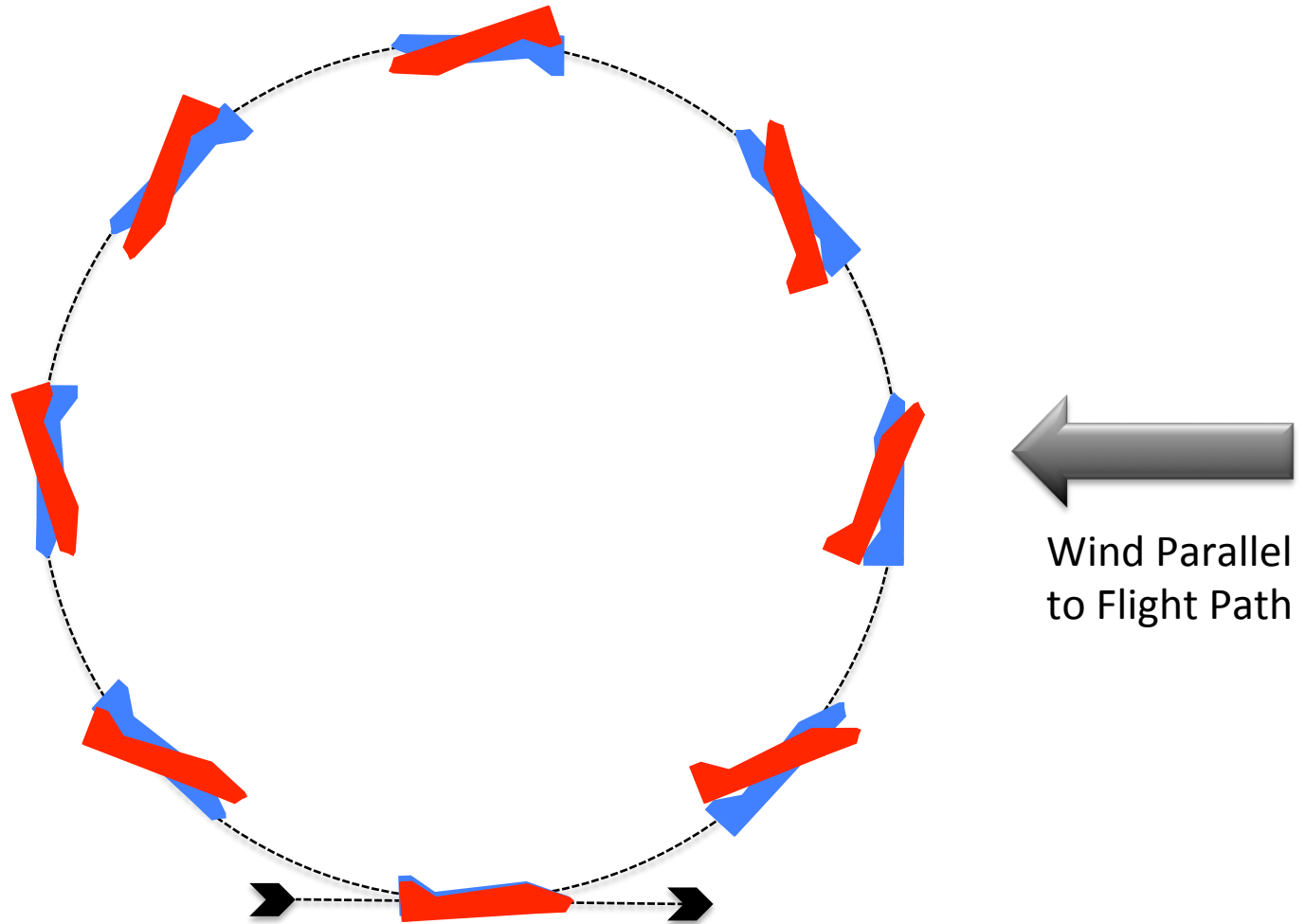


Loops

No Wind



Wind



Rolls

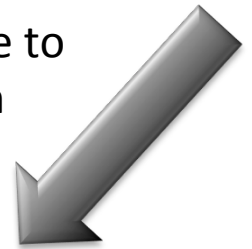
No Wind



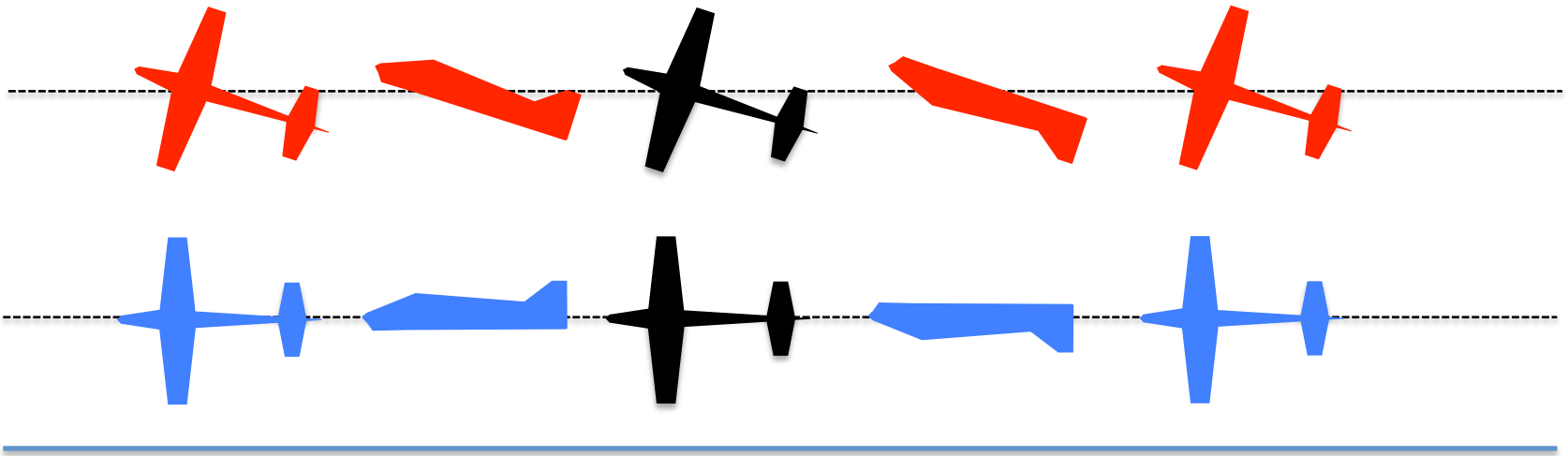
Wind



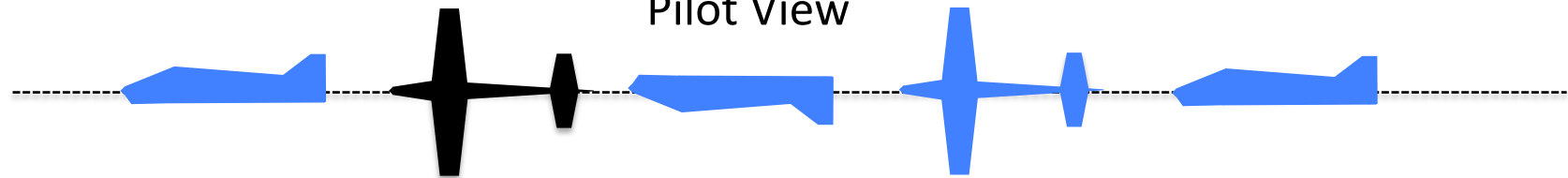
Wind at Angle to Flight Path



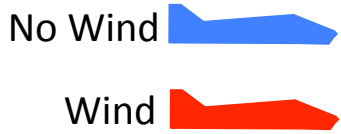
View from Above



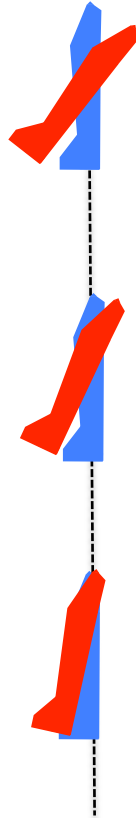
Pilot View



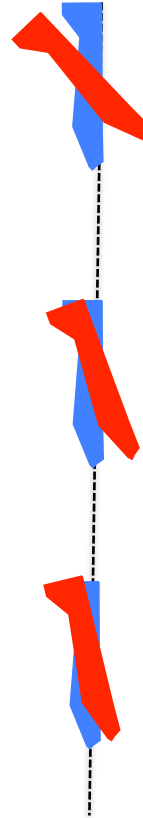
Adjust Attitude for Speed Changes



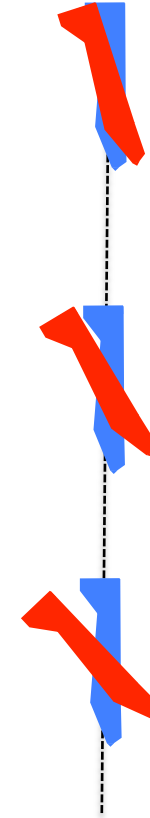
Slowing in an
Up-Line



Accelerating After
Stalled Maneuver
(e.g., Spin)



Slowing from
Applying Breaking
in a Down-Line

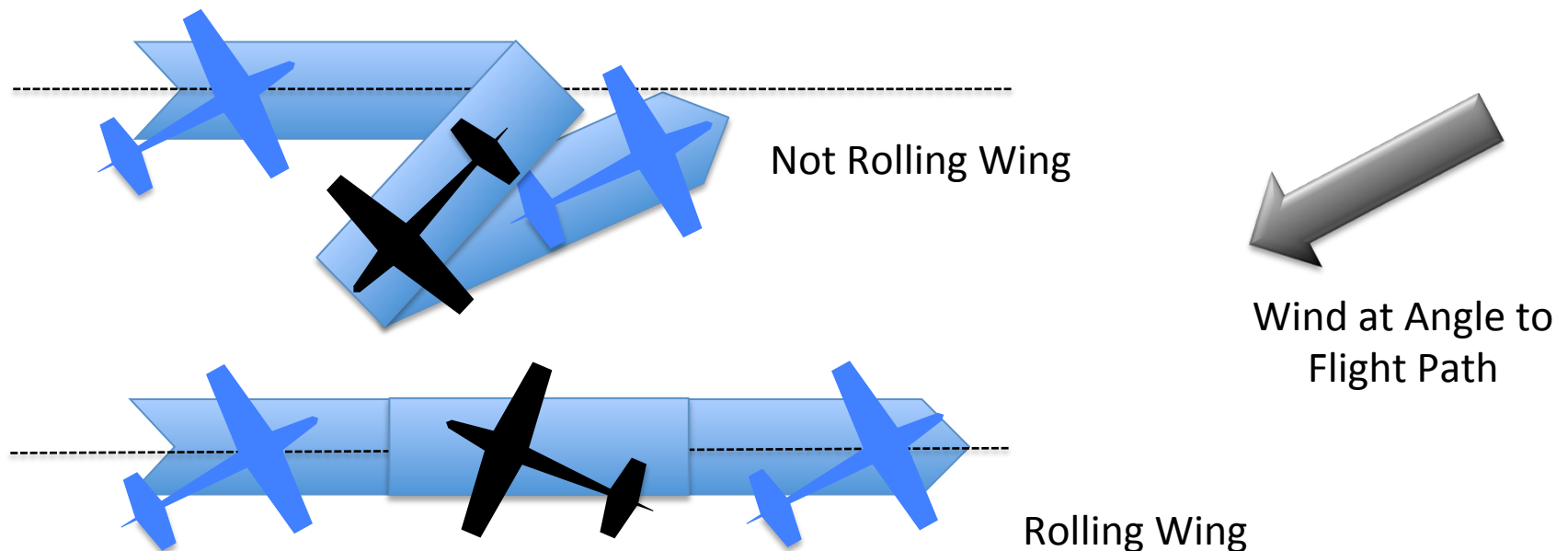


Wind Parallel
to Flight Path

Rolling the Wing

- In a crosswind, any time a loop or part loop is performed (e.g., pull to vertical), the wing must be rolled to keep the nose of the airplane angled into the wind and to maintain the appearance of wings level

Loop Viewed from Above



Practice Exercise

- Various winds, particularly cross
- $\frac{1}{2}$ Reverse Cuban 8; continuous back and forth
- Perfect the geometry holding track parallel to runway
- Observer providing feedback

