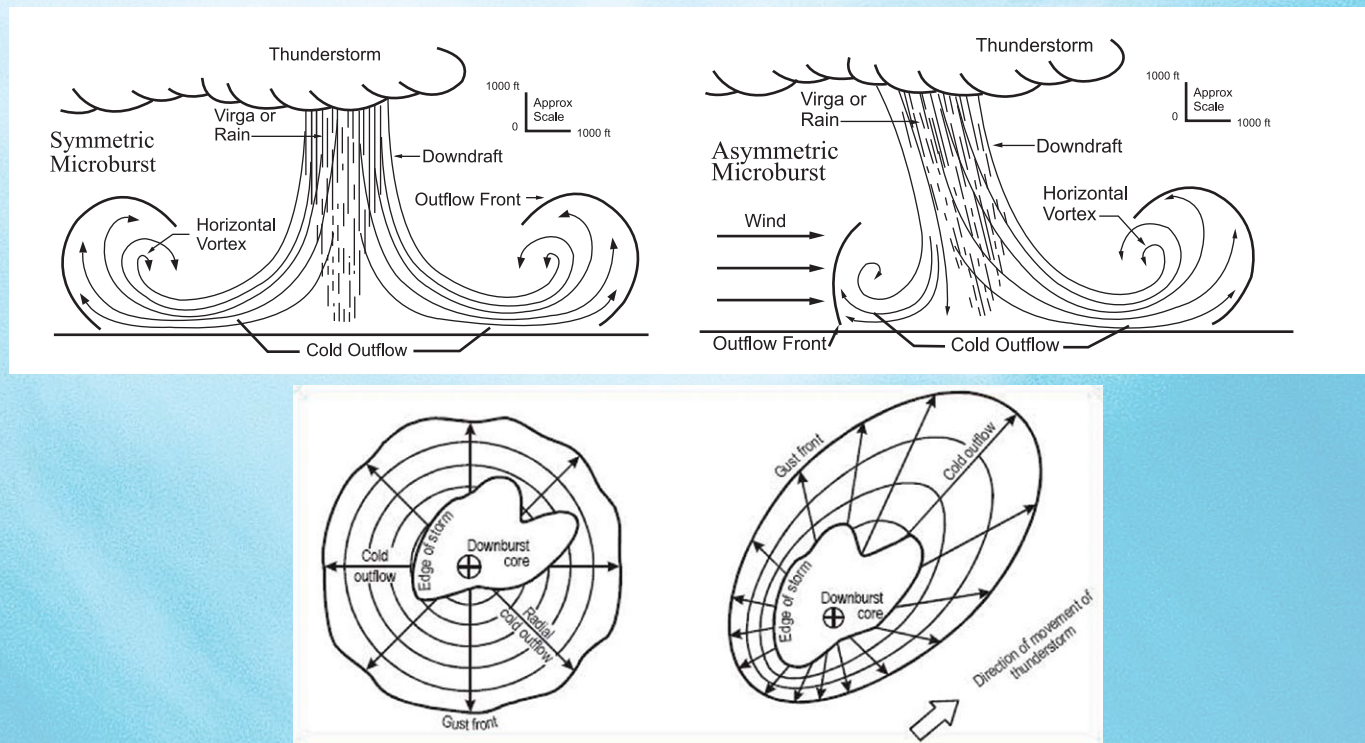


# WIND SHEAR - PILOT'S RULES

## AVOID, AVOID, AVOID! GO AROUND



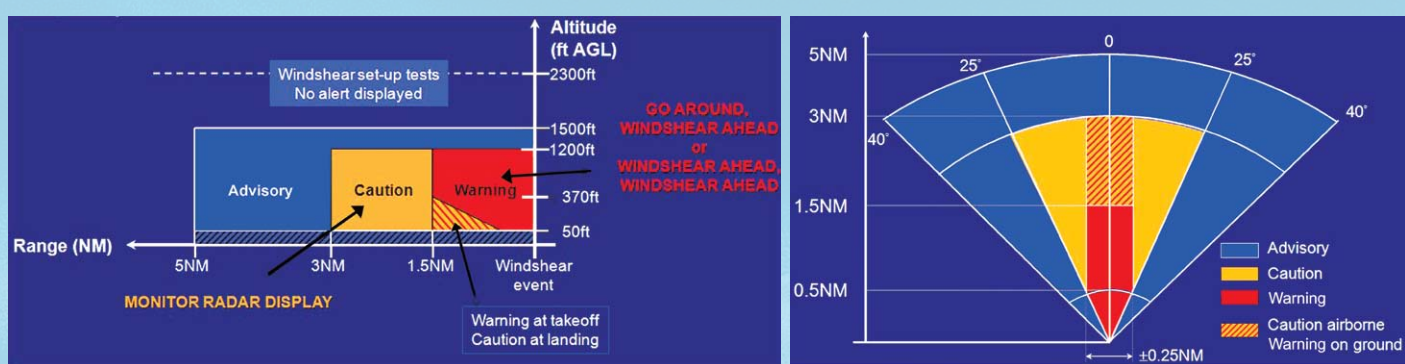
- ➔ **MICROBURST** is the most violent form of wind shear produced by thunderstorms. Pilots should **AVOID** flying into a microburst
- ➔ Microburst could be symmetric or asymmetric - pilots should not expect to always experience the standard sequence of microburst encounter, i.e. an increasing headwind and lift, then a downdraft from above the aircraft, followed by an increasing tailwind and sink
- ➔ To overcome the adverse effects of the microburst, pilots need to take timely corrective action to ensure aircraft safety, especially to go around

## SIMULATOR TRAINING



- ➔ Practice **"WIND SHEAR RECOVERY"**
- ➔ Know your **DRILLS**
- ➔ Any doubt - **AVOID or GO AROUND**

## ON-BOARD INSTRUMENTS



### REACTIVE WIND SHEAR VS PREDICTIVE WIND SHEAR WARNINGS

	Reactive Wind Shear	Predictive Wind Shear
Purpose	<ul style="list-style-type: none"> <li>• Detect <b>IN</b> the wind shear</li> <li>• Guidance to <b>RECOVERY</b></li> </ul>	<ul style="list-style-type: none"> <li>• Detect <b>AHEAD</b> of the aircraft</li> <li>• Guidance to <b>AVOID</b></li> </ul>
Principle	Comparison between inertial and aerodynamic data	Onboard Doppler weather radar

## WIND SHEAR PROCEDURE & RECOVERY

### Speed Indicator

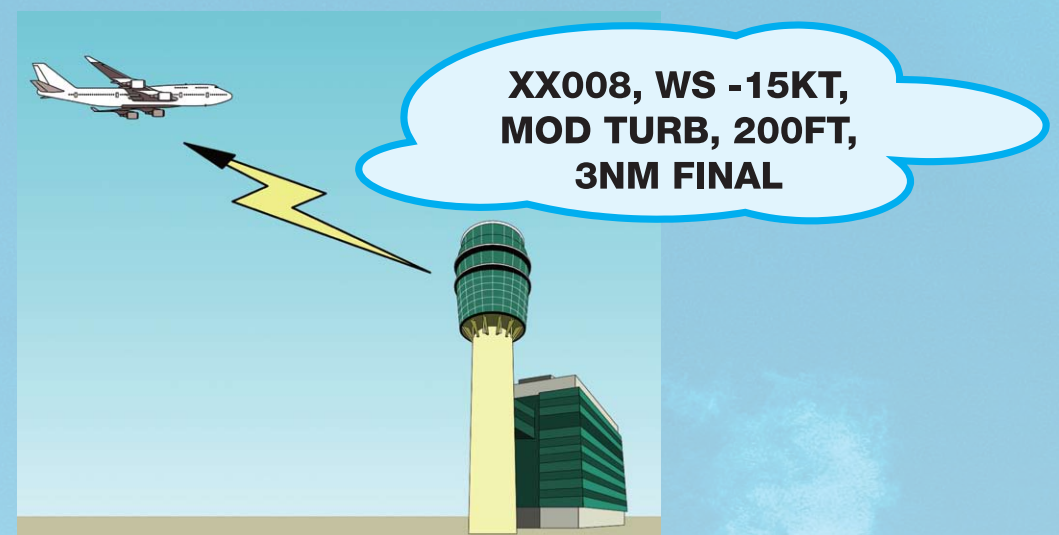


### Navigation Display



- ➔ Evaluate the "THREAT" (warning from ATIS/alert from ATC)
- ➔ Divert/delay or depart/approach
  - Rehearse **"WIND SHEAR RECOVERY"** procedure
  - "BUG UP" the airspeed
- ➔ Depart/approach
  - If wind shear encountered and/or onboard warning triggered, carry out **"WIND SHEAR RECOVERY"**

## REPORTING



- ➔ Don't forget to report wind shear and turbulence encounter for relay via ATC to subsequent aircraft and to MET office
- ➔ Make reference to:
  - Airspeed indicator (airspeed change)
  - FMS wind vector
- ➔ BUT remember the **YELLOW TREND ARROW** may be affected by transient (temporal) fluctuation due to turbulence

## EDUCATION

**HKO/IFALPA WIND SHEAR BOOKLET**  
**IFALPA SAFETY BULLETIN**  
**US FAA WIND SHEAR TRAINING AID**



### RESOURCES:

ICAO Annex 3 to the Convention on International Civil Aviation  
ICAO Manual on Low-level Wind Shear and Turbulence (Doc 9817)  
US Federal Aviation Administration's Advisory Circular No.00-54 "Pilot Windshear Guide"  
<http://www.weather.gov.hk>  
<http://www.ifalpa.org>

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