Turbulence information in the Aircraft

Captain Joe Burns

Managing Director –

Flight Standards and Technology

United Airlines

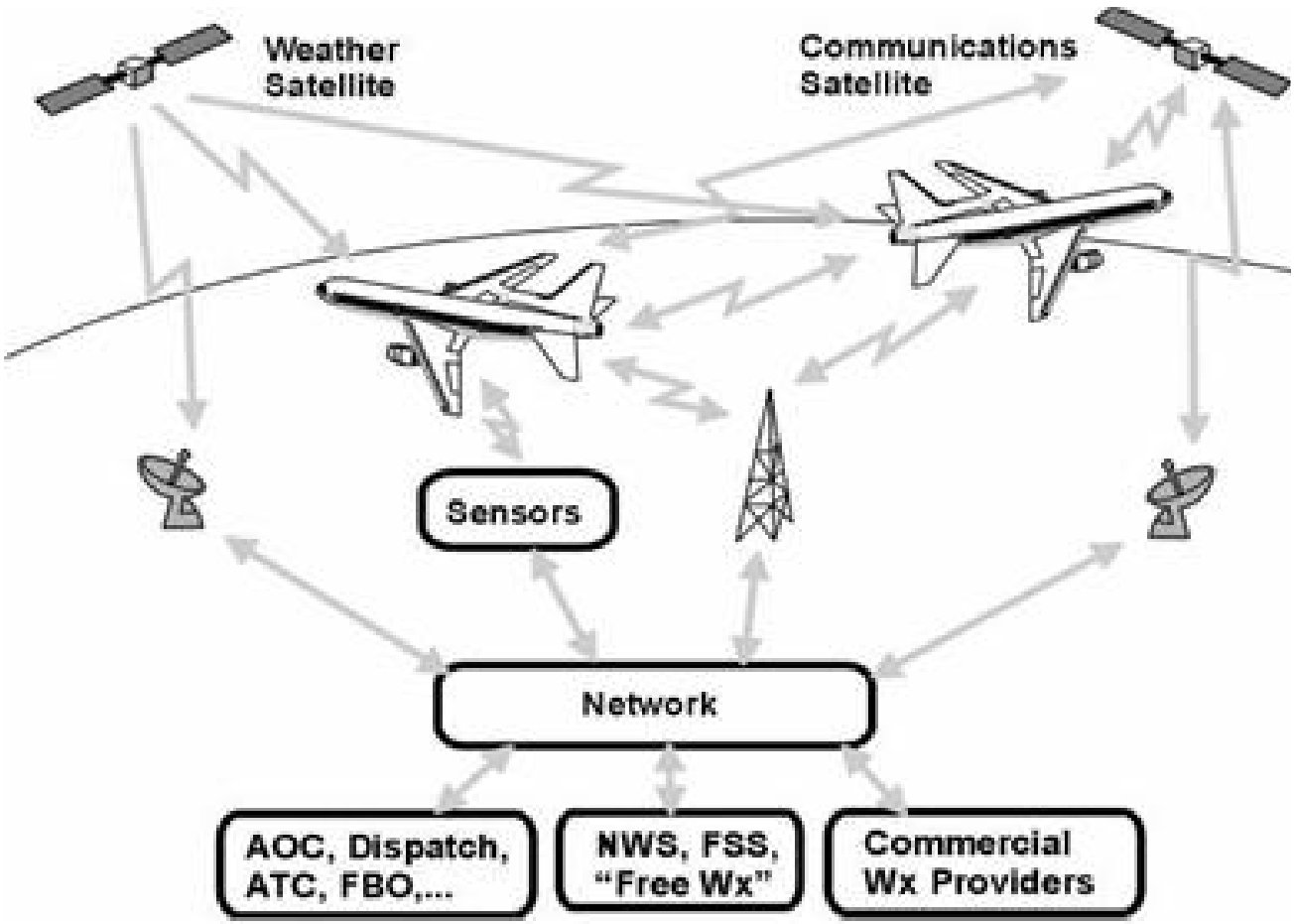
flightoperations

Flight Standards and Technology

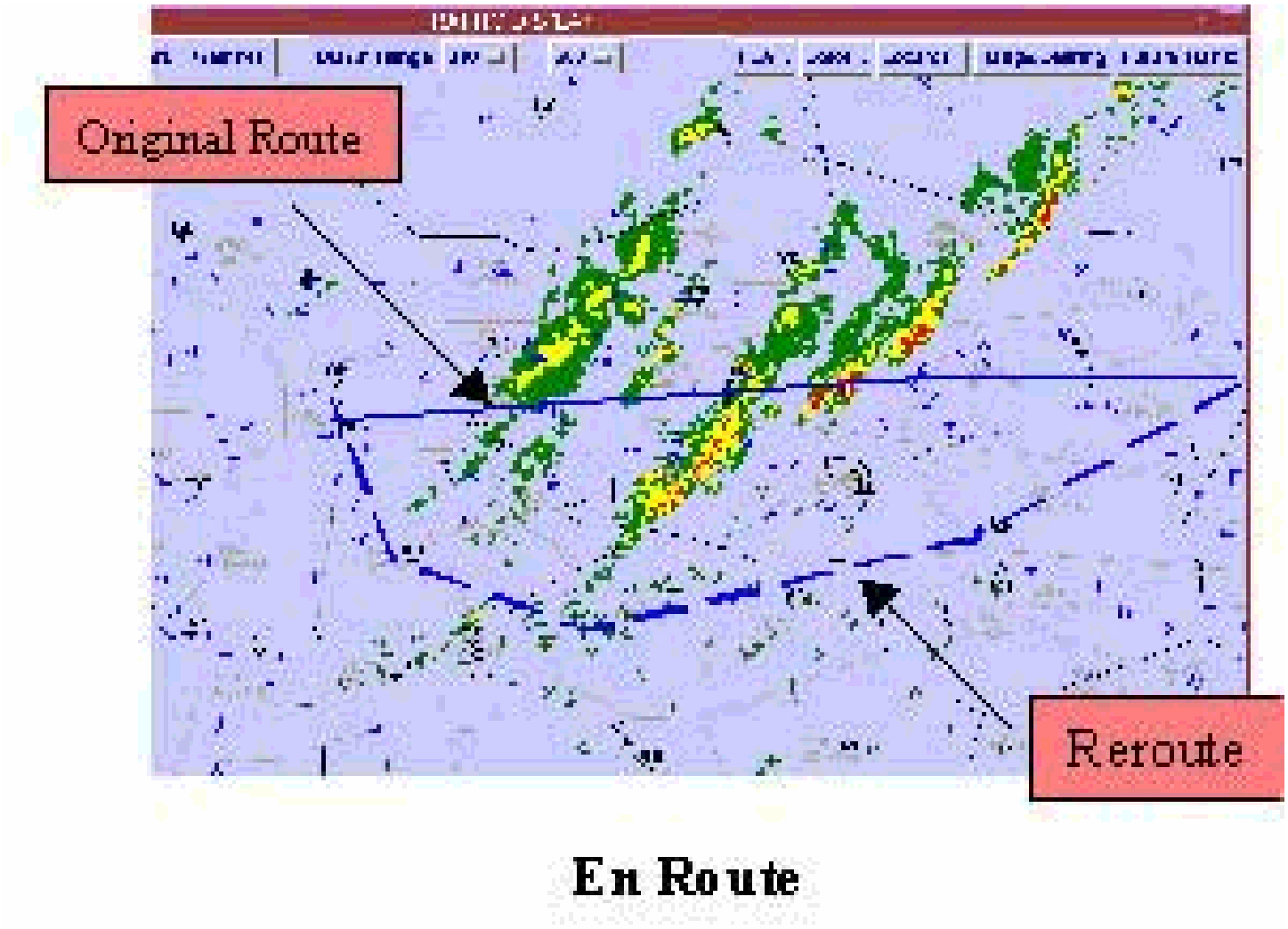
Air_Net/EFB Justification considerations

- Communications platform
- Pilot back injury reduction
- Convective reroute (block reduction)
- Contingency fuel reduction
- Transactional comm. reduction
- Paper reduction
- Weight reduction
- Future avionics replacement
- ***Turbulence injury reduction***

Communications: WINCOM Project

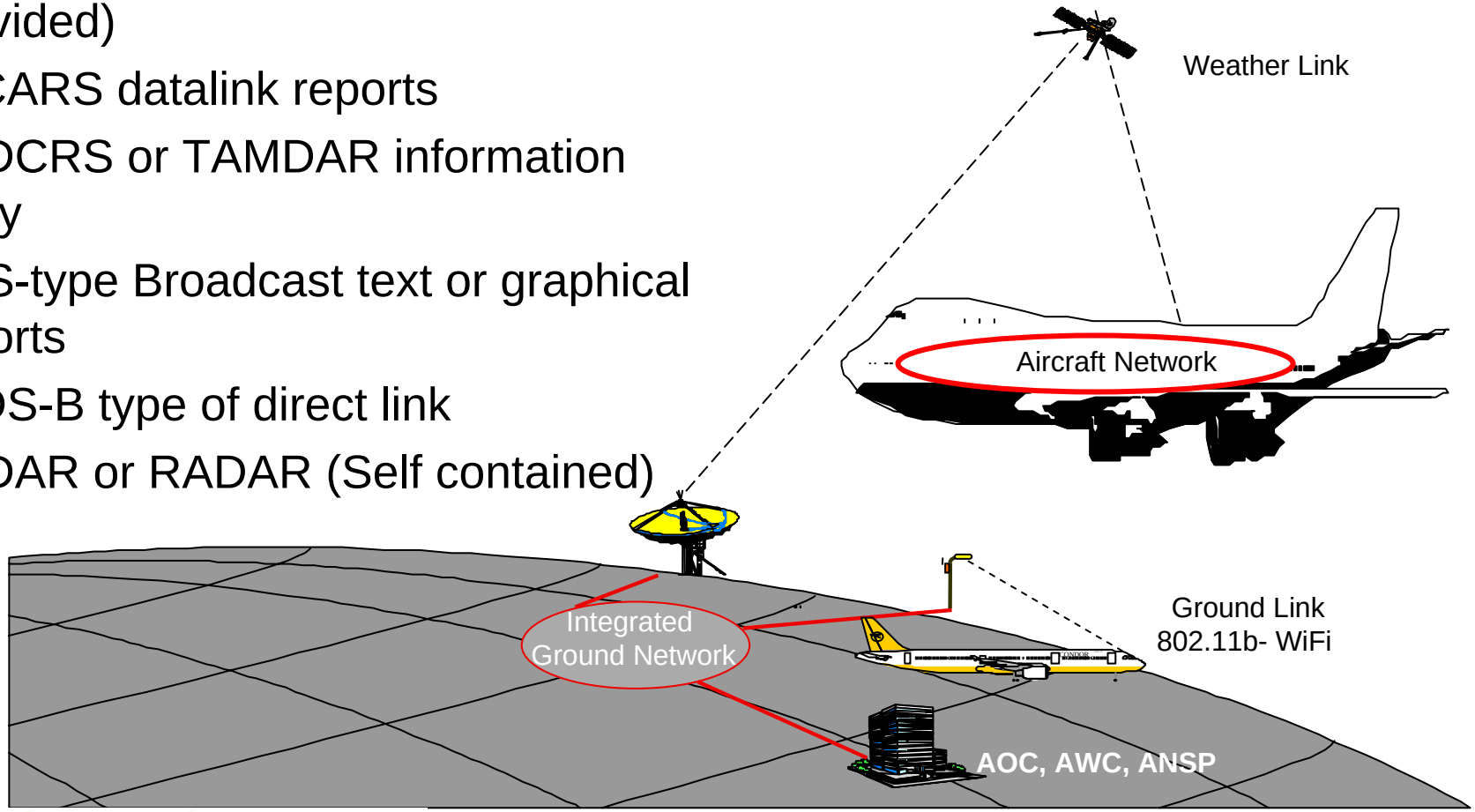


Making Strategic route decisions with EFB/Weather



Getting the information to the Aircraft:

- Voice reports (AOC, Aircraft or ANSP provided)
- ACARS datalink reports
- MDCRS or TAMDAR information relay
- FIS-type Broadcast text or graphical reports
- ADS-B type of direct link
- LIDAR or RADAR (Self contained)



Source: Flight Standards and technology, 4/04

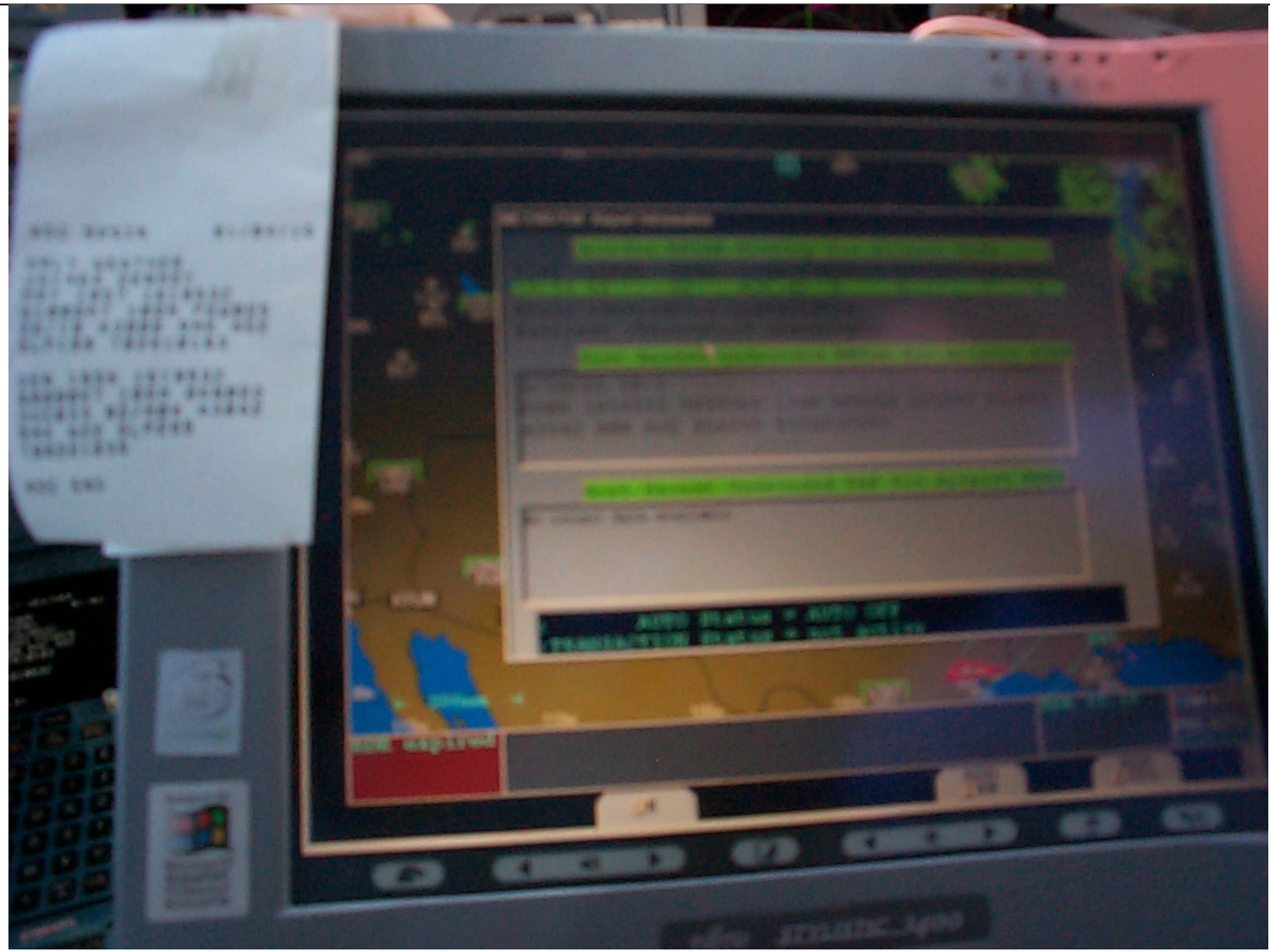
Type II EFB
Flight Deck Display Devices and Locations

EFB on our B747-400

EFB on B737

Typical EFB

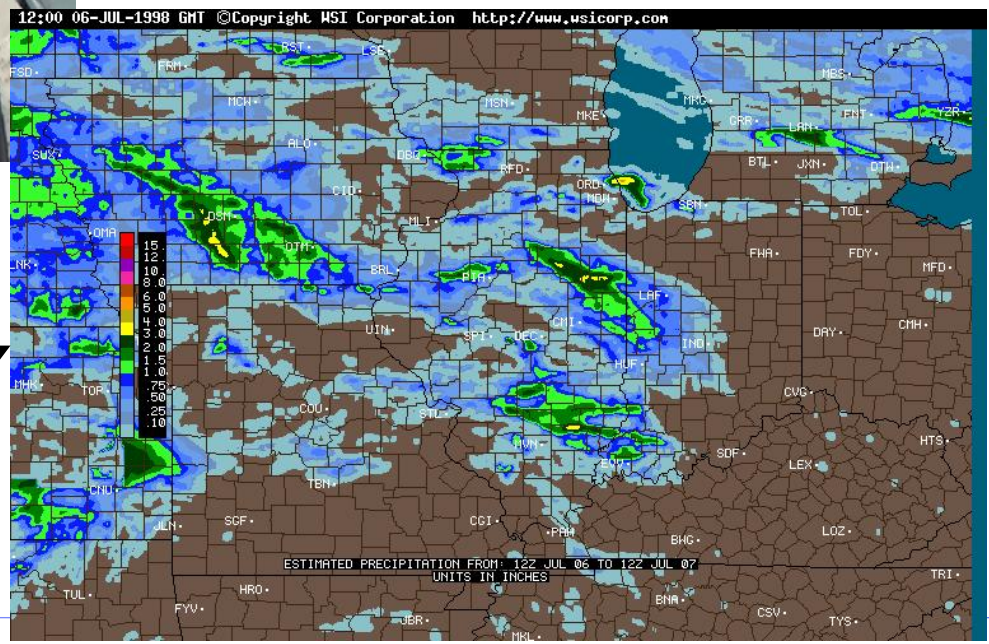
ACARS Paper printout vs. EFB weather



Live EFB weather with Datalink

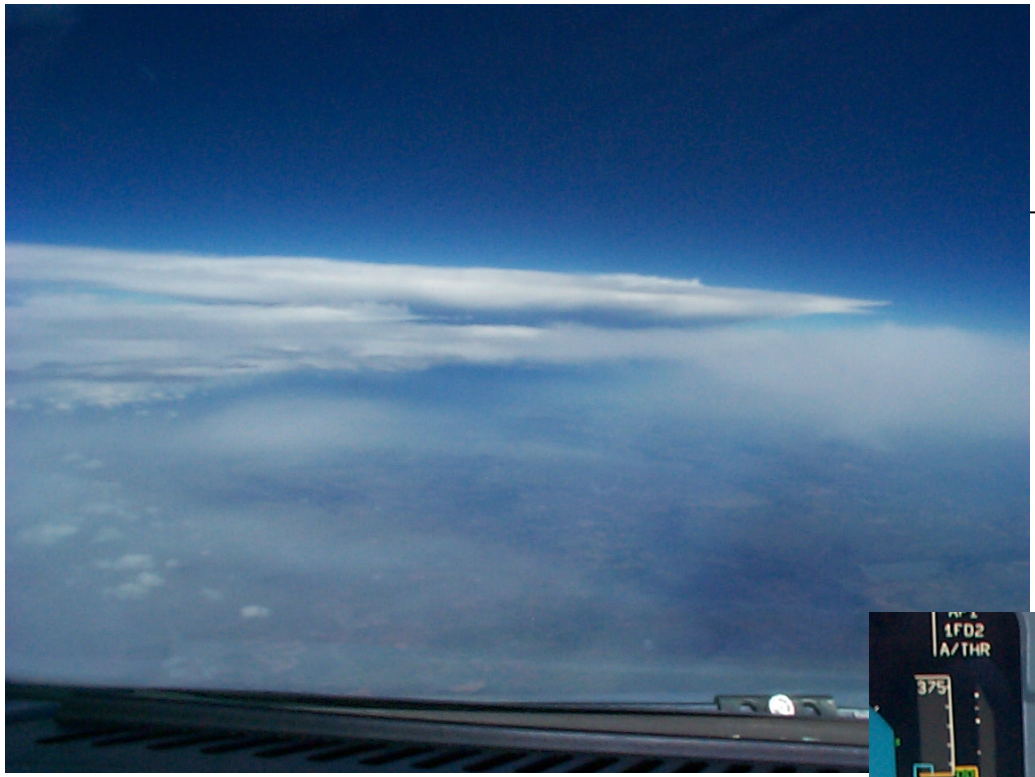
Live EFB Weather on our A320

Actual “Passenger” view of weather using Airfone connection



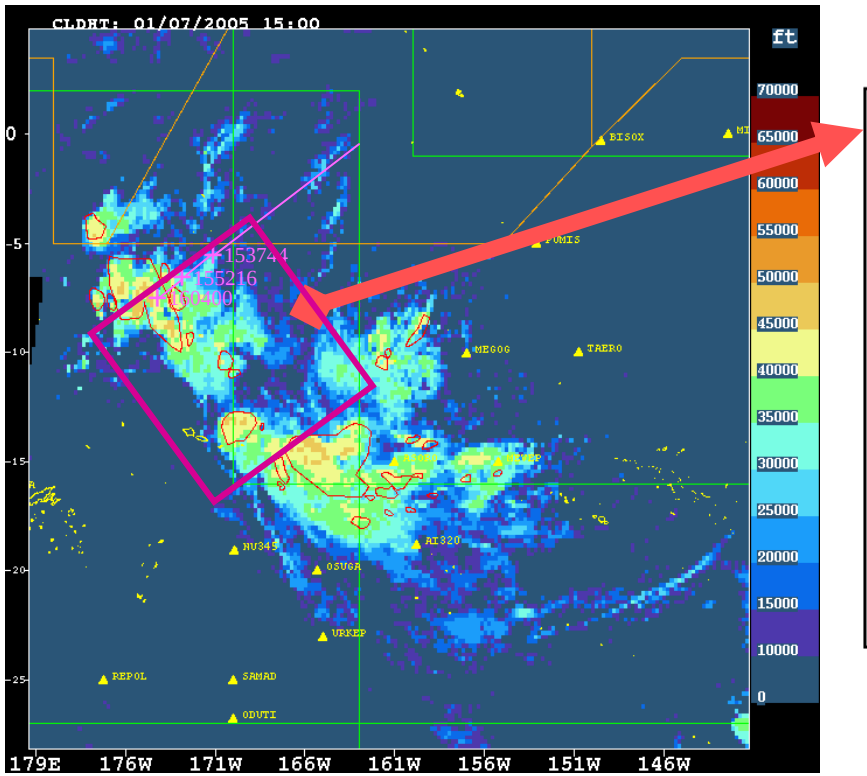
Track-up turbulence with SIGMET overlay plot

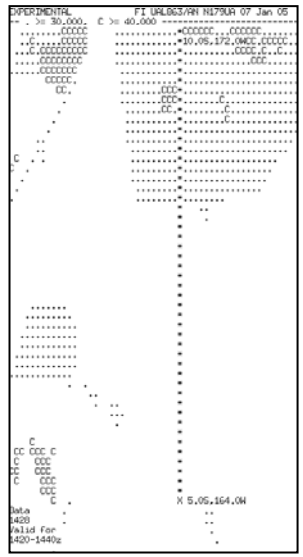
North-up turbulence plot



Oklahoma TRW in/out view

Reducing Turbulence Injuries with AirNet/EFB





Both Display formats available with EFB

Current ACARS display (UAL only)

Thank You!

Captain Joe Burns

United Airlines

Joe.Burns@united.com