WMO Seventh International **Volcanic Ash** Workshop Mike Stills **Flight Dispatch** October 2015







AIRCRAFT TYPES B747/B777





AIRCRAFT TYPES B787





AIRCRAFT TYPES B767/B757





AIRCRAFT TYPES A320/B737





U.S. CFR 121.101

Weather reporting facilities.

- (a) Each certificate holder conducting domestic or flag operations must show that enough weather reporting services are available along each route to ensure weather reports and forecasts necessary for the operation.
- (d) Each certificate holder conducting domestic or flag operations shall adopt and put into use an approved system for obtaining forecasts and reports of adverse weather phenomena, such as clear air turbulence, thunderstorms, and low altitude wind shear, that may affect safety of flight on each route to be flown and at each airport to be used.





U.S. CFR 121.535

Responsibility for operational control: Flag operations.

- (a) Each certificate holder conducting flag operations is responsible for operational control.
- (b) The pilot in command and the aircraft dispatcher are jointly responsible for the preflight planning, delay, and dispatch release of a flight in compliance with this chapter and operations specifications.
- (c) The aircraft dispatcher is responsible for—
- (1) Monitoring the progress of each flight;
- (2) Issuing necessary instructions and information for the safety of the flight; and
- (3) Cancelling or redispatching a flight if, in his opinion or the opinion of the pilot in command, the flight cannot operate or continue to operate safely as planned or released.
- (d) Each pilot in command of an aircraft is, during flight time, in command of the aircraft and crew and is responsible for the safety of the passengers, crewmembers, cargo, and airplane.





U.S. CFR 121.627

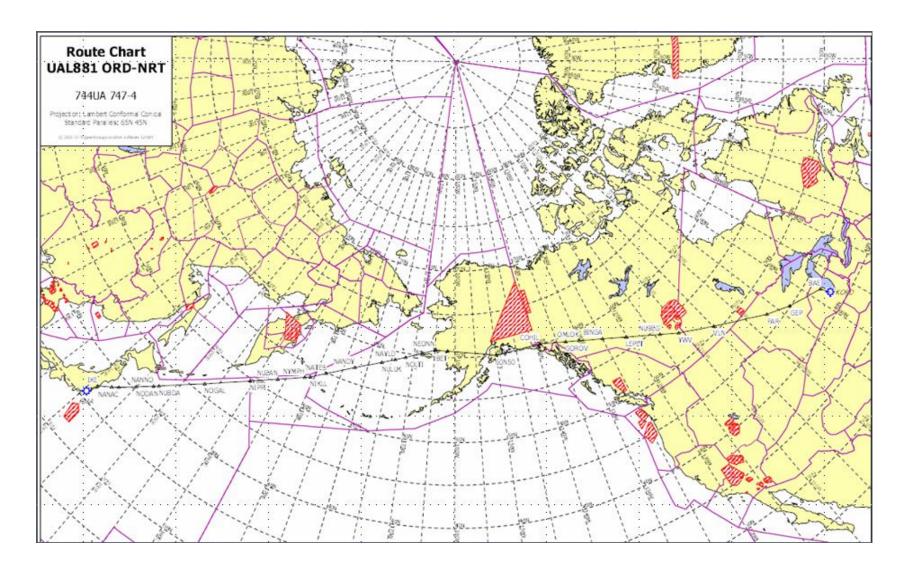
121.627 Continuing flight in unsafe conditions.

- (a) No pilot in command may allow a flight to continue toward any airport to which it has been dispatched or released if, in the opinion of the pilot in command or dispatcher (domestic and flag operations only), the flight cannot be completed safely; unless, in the opinion of the pilot in command, there is no safer procedure. In that event, continuation toward that airport is an emergency situation as set forth in § 121.557.
- (b) If any instrument or item of equipment required under this chapter for the particular operation becomes inoperative en route, the pilot in command shall comply with the approved procedures for such an occurrence as specified in the certificate holder's manual.



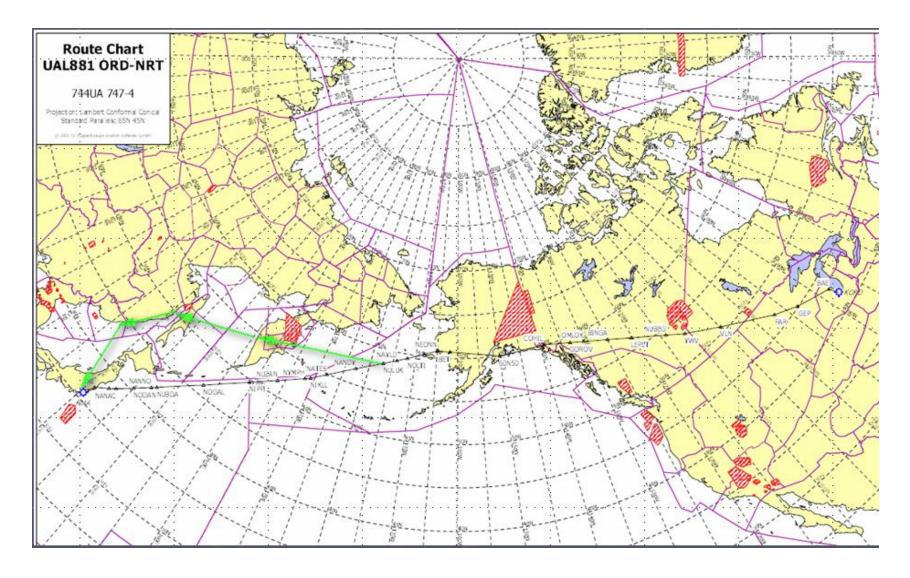


ROUTING IMPACT





ROUTING IMPACT





IMPACT

SARYCHEV - Impact and Cost to Airlines:

Between 12JUN09 and 17JUN09 the eruption and the ash cloud resulted in 65 re-routes, 6 diversions, 2 turn backs to originating departure cities, and 12 fuel stops. The additional costs to the air carriers from the Sarychev eruption and resulting ash cloud were estimated at approximately \$1.8M.

Russian ATC handled 179 total requests vs. normal workload of 20 flights per day.





FUTURE

- Harmonization of information and products across the globe
- Coordination with Air Traffic Management
- Methods to reconcile information and modeling





Thank you!

