



**National
Transportation
Safety Board**

Have pilots *really* forgotten how to fly?

Robert Sumwalt

Embry-Riddle Aviation Law and Insurance Symposium



NIGHTLYNEWS



CREDIT: AERO ICARUS

DISASTER IN THE COCKPIT

#NBCNIGHTLYNEWS



NTSB

U.S. Pilots Forget How to Fly Manually, Says Department of Transportation



Does autopilot dull the skills of U.S. airline pilots?



Office of Inspector General Audit Report

ENHANCED FAA OVERSIGHT COULD
REDUCE HAZARDS ASSOCIATED WITH
INCREASED USE OF FLIGHT DECK
AUTOMATION

Federal Aviation Administration
Report Number: AV-2016-013
Date Issued: January 7, 2016



National Transportation Safety Board said the pilots of Asiana Airlines Flight 214 were confused by the plane's technology, which directly resulted in the 2013 crash as the plane landed in San Francisco. (Justin Sullivan/Getty Images)

are so used to using automation technology in the cockpit that experts are worried some of them lack the skills to manually fly planes.

cern was summarized by the inspector general at the U.S. Department of Transportation, who took the Federal Aviation Administration to task this month, saying



NTSB

A few examples to raise concern

1992	Air Inter 148	Near Strasbourg, France
1995	American 965	near Cali, Colombia
2009	Colgan Air 3407	Buffalo
2009	Turkish Airlines 1951	Amsterdam
2009	Air France 447	Atlantic Ocean
2013	Asiana 214	San Francisco
2013	UPS 1354	Birmingham, AL
2014	Air Asia 8501	Java Sea

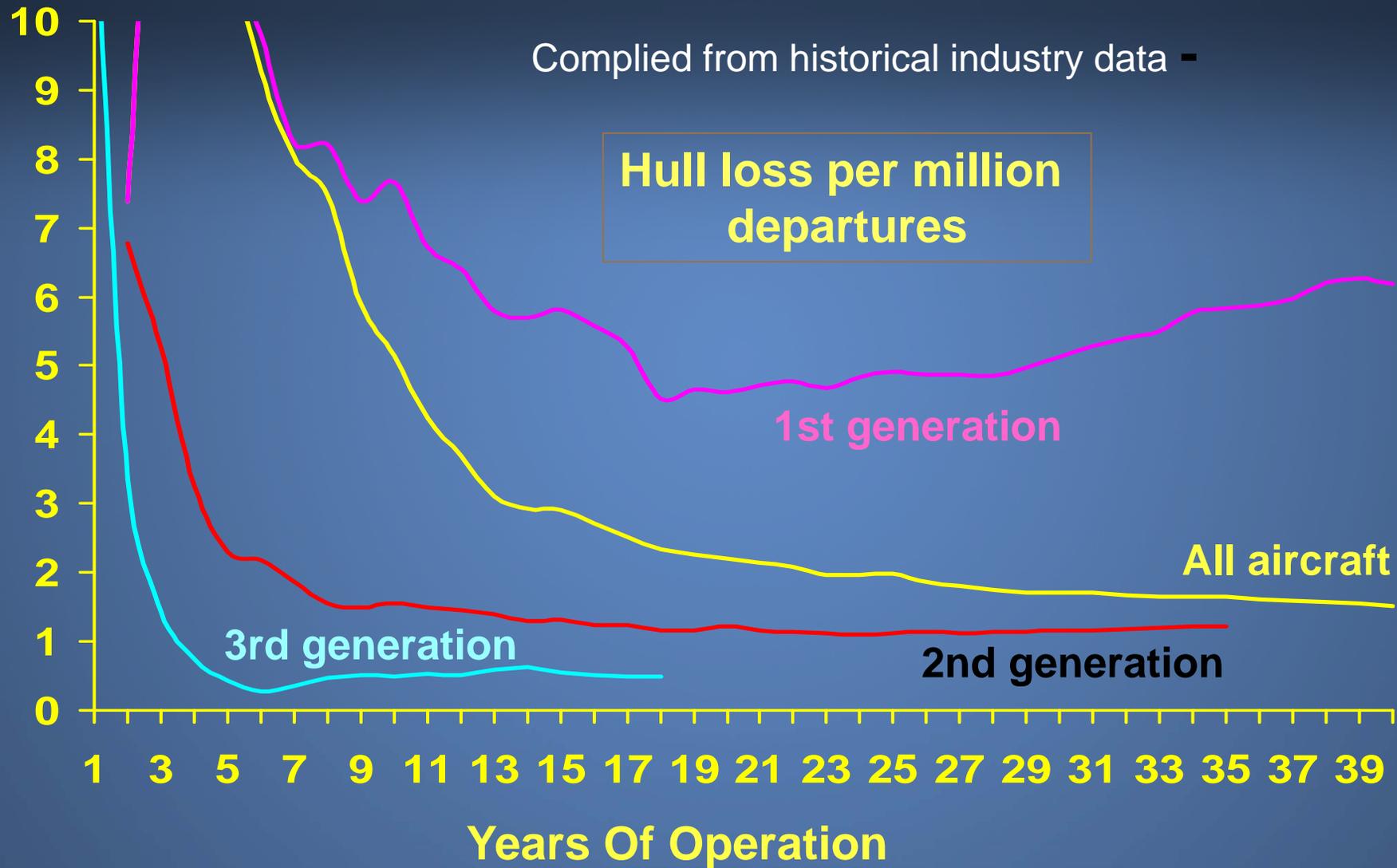


But, is this a new problem?

1972	Eastern L-1011
1979	AeroMexico DC-10
1985	China Airlines B747SP
1993	Continental Express EMB-120
1993	American International Airways DC-8
1995	American Airlines MD-83
1996	ABX Narrows Virginia DC-8

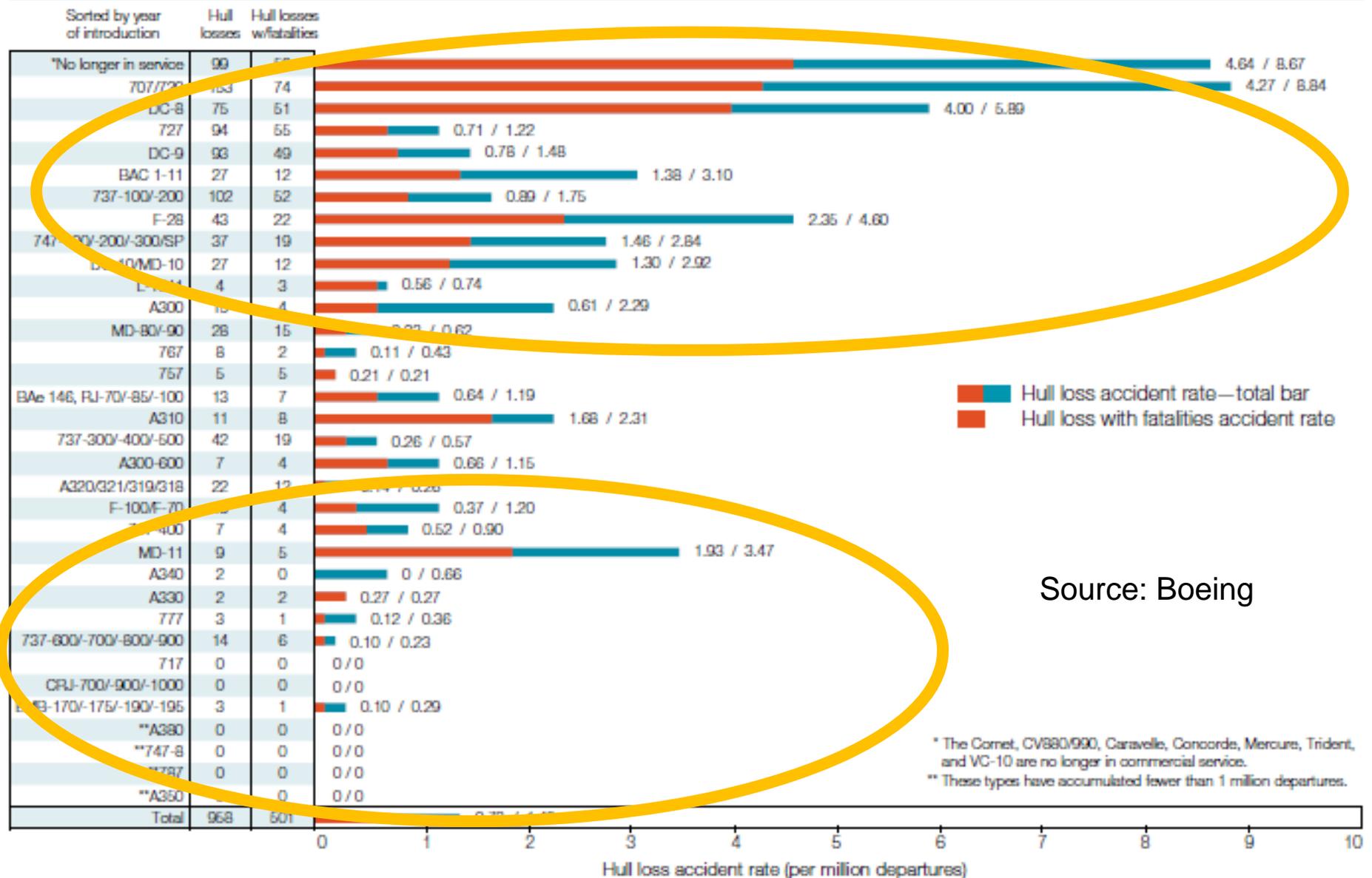


Aircraft Generation “Learning Curve”



Accident Rates by Airplane Type

Hull Loss Accidents | Worldwide Commercial Jet Fleet | 1959 through 2014



Source: Boeing

* The Comet, CV880/990, Caravelle, Concorde, Mercure, Trident, and VC-10 are no longer in commercial service.
 ** These types have accumulated fewer than 1 million departures.

In conclusion

- Newer generation aircraft have many safety benefits, as vividly illustrated by decreased accidents.
- There have been accidents where pilots of older generation aircraft have mismanaged automation.
- Even decades ago there were accidents where pilots misapplied controls and failed to recover from a stall.



In conclusion

- However, just because this is not necessarily a new problem does not mean more needs to be done.
- NTSB has recommended, and FAA has adopted, improvements to training and design to further improve safety.





National Transportation Safety Board