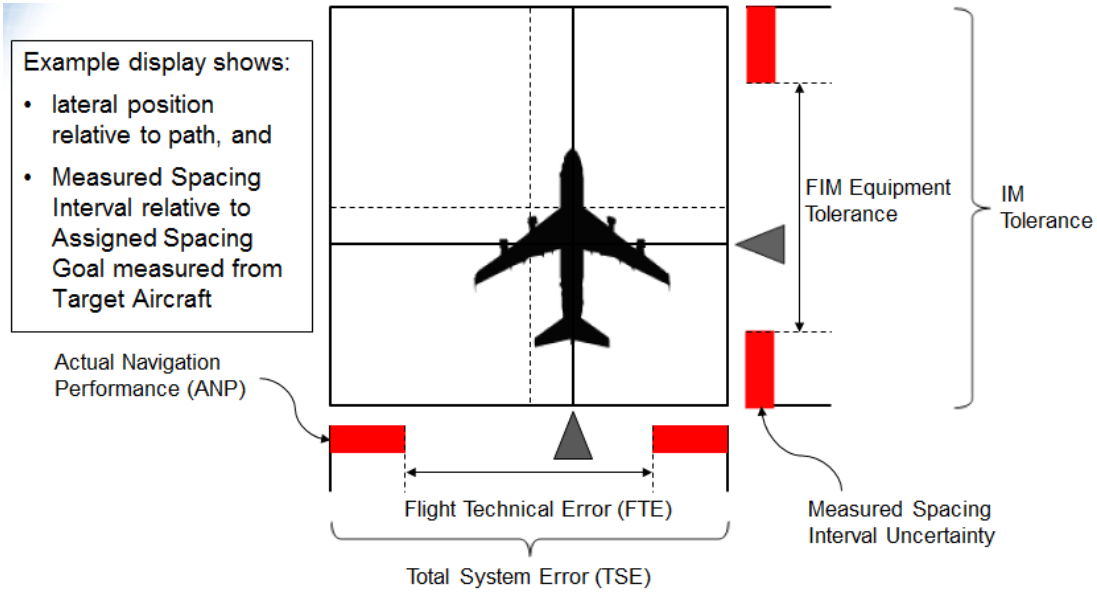
Rapporteur**:** Billy Josefsson

Session Chair: Dirk Kuegler

Towards Defining Required Interval Management Performance (RIMP)
Paper 78 presented by Lesley A. Weitz

The Interval Management (IM) concept is about to manage the spacing between two aircraft for all phases of flight. IM adress the capacity issue and an implementation has potential to increase capacity of a given airspace. The IM tolerance has been examined in order to identify constraints. The possibility to link the IM to functions like auto-throttle is also mentioned. When applying the IM concept, speed control is critical it must be within acceptable range and also demonstrate good string performance to allow aircraft to follow each other in a smooth way. Future work includes the evaluation of IM use cases and develop MOPS.



Interval Management - Spacing (IM-S) during departure, findings from a flight crew simulation.
Paper 120 presented by William Penhallegon MITRE

Several simulations at MITRE suggest that IM/Spacing will be more efficient in terms of low variance spacing, reduced interventions and lower workload. Further, MITRE demonstrates improvements and acceptability and reduced workload for pilots and controllers. This paper focuses on IM for departures namely the Chicago O'Hare departures and the merge with departures from MDW airport. The concept was tested in a B777 simulator at MITRE using 16 pilots. The pilots suggested that FIM-S is compatible with, acceptable and desirable for the current flight deck operations in the enroute airspace. In general it worked well, a concern form the pilots was raised about the possibility that the IM-S suggested speed intervals is not optimal from a cost index p.o.v.. A few comments were raised on the additional requirements for scanning the FIM-S display e.g. additional workload and extra head down time.

Airline Based En Route Sequencing and Spacing: Lessons Learned for Interval Management
Paper 94 presented by Peter Moertl, MITRE

This paper address the Ground based IM. **A**irline **B**ased **E**n Route **S**equencing and **S**pacing (ABESS) is a Groundbased IM-S application for airlines. Practically the AOC uplink early/ minor speed advisories to the aircraft in order to achieve a spacing goal over a given En Route Merge fix. Development started 2005 and is now completed, numerous of trials and field tests has been performed with UPS.

The intended effect with ABESS is to increase the overall efficiency, reduce ATC workload and RTFF congestion and realize the desired optimized arrival sequence for airline needs.

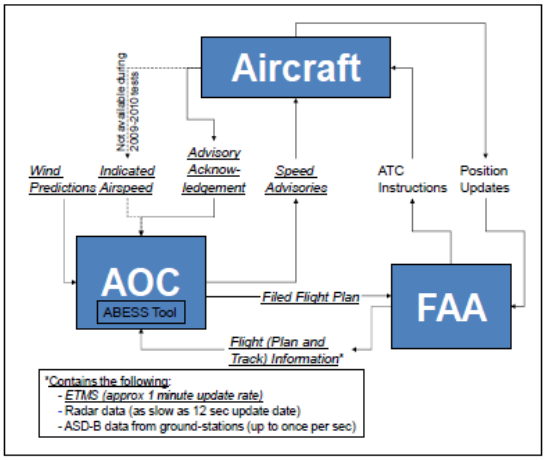


Figure 3. Information requirements for ABESS

Final field-trials over 4 night operations using ABESS demonstrated the expected functionality, but also revealed a non-wanted to high nuisance rate in order to go operational. The nuisance was attributed to weaknesses in wind prediction, variability of ground speeds and unforeseen trajectory changes initiated from ATC.