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Airborne Separation Assurance Systems

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Summary (1/3)

- Conflict resolution:
  - Villaplana: speed control resolutions yielded complicated procedures
  - Schild: Keep it simple! Is absolutely necessary
  - Hoekstra: A simple and working algorithm
- How to implement an acceptable (simple) conflict resolution algorithm?

Summary (2/3)

- Blom: Conflict Prediction: analysis rather than design (yet); collision risk modeling

- Hilb: Progress report on Safe Flight 21 Operational Evaluation (Cieplak)
  - Implementation of ADS-B / CDTI

- Mills: Data reduction and analysis of Safe Flight 21 Operational Evaluation

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Summary (3/3)

- Post: Operational assessment of Free Flight Phase 1

  – implementation of pFAST and results

- Smith: internet (IPv6) is overtaking ATN rapidly

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NAPOLI 2000 vs Saclay 1997

- ## Saclay 1997:
  - "ADS-B and CDTI are part of the future"
    N XX: Yep!

  - "Self-separation is likely to be possible in low density airspace" **N XX: Confirmed**

  - "Reservations about feasibility of self-separation in medium/high density airspace" **N XX: by no means inconceivable!**

  - "Demonstrate the capacity gain" **N XX: done**

NAPOLI 2000 vs Saclay 1997 (2)

- Major issues still to be addressed (Saclay revisited)

  – Responsibilities and Legislation

  – Safety implications

  – Workload implications (..in the air and..) on the ground

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Conclusions

- **Significant Progress on ASAS initial -promising- applications**

- **Considerable commitment to implement ADS-B / CDTI**

- **Perceived benefits**
  - lower mean separation values
  - better throughput
  - improved situational awareness

Recommendations

- ## december ATM 2001 : ALASKA
  - home of Safe flight 21
  - it may be warmer inside