

References for

“Overview of the RTCA SC-206, *Guidance for the Usage of Data Linked Forecast and Current Wind Information in Air Traffic Management (ATM) Operations Document*” Poster

1. Air Traffic Management and Systems Lecture Notes in Electrical Engineering 290, DOI 10.1007/978-4-431-54475-3_4, Springer Japan, 2014
2. Annex 3 to the Convention on International Civil Aviation, Meteorological Service for International Air Navigation, Seventeenth Edition, July 2010
3. Audenaerd, L., Estimating Approach Path Coverage of Aircraft-Derived Meteorological Data in Advanced Air Traffic Management Applications, 2013
4. Audenaerd, L. & Koch, M., An Analysis of Alternatives for Wake Turbulence Mitigation for Arrivals – System (WTMA-S), MTR100282, The MITRE Corporation, August 31, 2010
5. Audenaerd, L. & Lunsford, C., Applying Improved Wind and Aircraft Performance Data in Wake Procedure Concepts, The MITRE Corporation, 2014
6. Audenaerd, L., Lunsford, C., & Schaffer, C., Analysis of Design Alternatives for Aircraft Based Weather Input to Wake Turbulence Mitigation for Arrivals – System (WTMA-S) at San Francisco International Airport (SFO), MTR130283, The MITRE Corporation, 2013
7. Belotserkovsky, A., Preliminary Development of the Airborne Vortex Forecasting System, November 2000, Appendix G, Wake Vortex Prediction: An Overview, Wayne Jackson, ed., Transportation Development Centre, Transport Canada, March 2001
8. Belotserkovsky, A., New Principles of Wake Vortex Safety, Presentation to the 1st Workshop of WakeNet2-Europe (in collaboration with WakeNet-USA), November 11-12, 2003
9. Cole, R. E., Wind Prediction Accuracy for Air Traffic Management Decision Support Tools, Massachusetts Institute of Technology Lincoln Laboratory, June 13-16, 2000
10. Edwards, C., McPartland, M.D., Reynolds, T.G., Sandberg, M.J., Teller, T.L., & Troxel, S.W., ATC-422 Wind Information Requirements for NextGen Applications Phase 3 Final Report, 15 December 2014
11. Federal Aviation Administration, Advisory Circular 20-140C, Guidelines for Design Approval of Aircraft Data Link Communications Systems Supporting Air Traffic Services (ATS)
12. Federal Aviation Administration, Job Order 7110.65W, Air Traffic Control
13. Federal Aviation Administration, Job Order 8900.1, Flight Standards Information Management System (FSIMS)
14. Forrester, D.A. & Dean, G.C., Improvement of Meteorological Data for Air Traffic Management Purposes, Air Traffic Control Quarterly, Vol. 2. No. 2, pp 85-101, 1994
15. Holforty, W.L., Flight-Deck Display of Neighboring Aircraft Wake Vortices, Ph.D. Dissertation, Stanford University, June 2003
16. Holzäpfel, F., Effects of Environmental and Aircraft Parameters on Wake Vortex Behavior, Journal of Aircraft, Vol. 51, No. 5, 2014, pp. 1490-1500
17. ICAO Working Paper A36-WP/193, Current Vortex Flight Safety Problems in Civil Aviation
18. Journal of Geophysical Research, Vol. 116, 2011

19. Journal of Aircraft, Vol. 51, No. 6, Nov-Dec 2014
20. Lunsford, C., Koch, M., Stassen, H. P., Estes, S., & Hogan, B., Exploring a Flight Deck Based Wake Turbulence Situational Awareness Tool, The MITRE Corporation, 2012
21. Mueller, K. T., Bortins, R., Schleicher, D. R., Sweet, D., & Coppenbarger, R. A., Effect of Uncertainty on En Route Descent Advisor (EDA) Predictions, 2004
22. Reynolds, T.G., Glina, Y., Troxel, S.W., & McPartland, M.D., ATC-399, Wind Information Requirements for NextGen Applications Phase 1: 4D-Trajectory Based Operations (4D-TBO), 20 February 2013
23. RTCA DO-200B, Standards for Processing Aeronautical Data
24. RTCA DO-236C Change 1, Minimum Aviation System Performance Standards: Required Navigation Performance for Area Navigation
25. RTCA DO-252A, Minimum Interoperability Standards (MIS) for Automated Meteorological Transmission (AUTOMET)
26. RTCA DO-260B, Minimum Operational Performance Standards for 1090 MHz Automatic Dependent Surveillance – Broadcast (ADS-B), Appendix V
27. RTCA DO-282B, Minimum Operational Performance Standards for Universal Access Transceiver (UAT) Automatic Dependent Surveillance – Broadcast, Appendix S
28. RTCA DO-308/EUROCAE ED-151, Operational Services and Environment Definition (OSED) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services
29. RTCA DO-328A/EUROCAE ED-195A, Safety, Performance and Interoperability Requirements Document for Airborne Spacing – Flight Deck Interval Management (APS-FIM)
30. RTCA DO-339, Aircraft Derived Meteorological Data via Data Link for Wake Vortex, Air Traffic Management and Weather Applications – Operational Services and Environmental Definition (OSED)
31. RTCA DO-340, Concept of Use for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services
32. RTCA DO-360, Suggested Standards Development Activities to Move Forward with Wake Vortex, Air Traffic Management, and Meteorological Applications
33. RTCA DO-361/EUROCAE ED-236, Minimum Operational Performance Standards (MOPS) for Flight-Deck Interval Management (FIM)
34. RTCA DO-364, Minimum Aviation System Performance Standards (MASPS) for Aeronautical Information/Meteorological Data Link Services
35. Schwartz, B. E., Benjamin, S.G., Green, S.M., & Jardin, M.R., Accuracy of RUC-1 and RUC-2 Wind and Aircraft Trajectory Forecasts by Comparison with ACARS Observations, Wea. Forecasting, 15, p. 313-326, June 2000
36. Swieringa, Kurt A., Underwood, Matthew C, Barmore, Bryan, & Leonard, Robert D. (2014), An Evaluation of a Flight Deck Interval Management Algorithm including Delayed Target Trajectories, American Institute of Aeronautics and Astronautics
37. Wynnyk, C. & Gouldey, D., 2011 Seattle Required Time of Arrival (RTA) Flight Trials Analysis Report, MITRE CAASD, July 2012

Acronyms for
“Overview of the RTCA SC-206, Guidance for the Usage of Data Linked Forecast and Current Wind Information in Air Traffic Management (ATM) Operations Document” Poster

Acronym/ Abbreviation	Expansion/Explanation
4D	Four-Dimensional
4DT	Four- Dimensional Trajectory
A/C	Aircraft
AbO	Aircraft-based Observation
ABP	Achieve-by Point
ADS-B	Automatic Dependent Surveillance – Broadcast
AGL	Above Ground Level
ASG	Assigned Spacing Goal
ASOS	Automated Surface Observing System
ATC	Air Traffic Control
ATM	Air Traffic Management
CT	Control Time
CTW	Control Time Window
DFL	Descent Forecast Level
DST	Decision Support Tool
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FAF	Final Approach Fix
FIM	Flight-Deck Interval Management
FMS	Flight Management System
FRAC	Final Review and Comment
ft	feet
GFS	Global Forecast System

Acronym/ Abbreviation	Expansion/Explanation
GIM	Ground Interval Management
hr	hour
HRRR	High Resolution Rapid Refresh
IM	Interval Management
kts	knots
MET	Meteorological
MIT	Massachusetts Institute of Technology
NM	Nautical Miles
PD	Paired Departure
PTP	Planned Termination Point
RAP	Rapid Refresh
RTA	Required Time of Arrival
RTA TE	Required Time of Arrival Time Error
RTCA SC-206	RTCA Special Committee 206 – Aeronautical Information and Meteorological Data Link Services
STA	Scheduled Time of Arrival
TA or TTF	Target Aircraft / Traffic to Follow
TBO	Trajectory Based Operations
TOAC	Time of Arrival Control
WTMA	Wake Turbulence Mitigation for Arrivals
WTMD	Wake Turbulence Mitigation for Departures