

Joint Planning and Development Office (JPDO)

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ATM-Weather Integration Plan

1 F. ACRONYMS

ACRONYM	DEFINITION
2D	Two Dimension
3D	Three Dimension
4D	Four Dimension
4-D Wx Data Cube	Four Dimension Weather Data Cube
4-D Wx SAS	Four Dimension Weather Single Authoritative Source
4DT	Four Dimension Trajectory
A/DMT	Arrival / Departure Management Tool
AACR	Automated Airspace Congestion Resolution
AAR	Airport Arrival Rate
ACP	Airspace Congestion Predictor
ADDS	Aviation Digital Data Service
ADR	Airport Departure Rate
ADS	Automatic Dependent Surveillance
ADS-B	Automatic Dependent Surveillance Broadcast
AFP	Airspace Flow Program
AGL	Above Ground Level
AIRMET	Airman's Meteorological Information
AIV	Atmospheric Impact Variable
AIXM	Aeronautical Information Exchange Model
AJN	FAA Operations Organization
ANS	Aviation Network Service
ANSP	Air Navigation Service Provider
AOC	Air Operations Center
API	Application Programming Interface
ARR	Arrival
ARTCC	Air Route Traffic Control Center
ASOS	Automated Surface Observing System
ASPM	Aviation System Performance Metrics

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ASR-8/9/11	Airport Surveillance Radar Models 8, 9, and 11
ASR-WSP	Airport Surveillance Radar Weather System Processor
ATC	Air Traffic Control
ATCSCC	Air Traffic Control System Command Center
ATCT	Air Traffic Control Tower
ATIS	Automated Terminal Information System
ATL	Hartsfield-Jackson Atlanta International Airport
ATM	Air Traffic Management
ATM-WIP	Air Traffic Management – Weather Integration Process
AWO	Aviation Weather Office
AWOS	Automated Weather Observing System
AWRP	Aviation Weather Research Program
AWSS	Automated Weather Sensor System
BA	Big Airspace
C&V	Ceiling and Visibility
CAASD	Center for Advanced Aviation System Development
CAT	Clear Air Turbulence
CAT I	Facility providing operation down to 200 feet decision height and runway visual range not less than 2600 feet.
CAT II	Facility providing operation down to 100 feet decision height and runway visual range not less than 1200 feet.
CAT III	Facility providing operation possibly down to no decision height and no runway visual range. Can possibly use auto pilot for landing.
CATM / C-ATM	Collaborative Air Traffic Management
CATM-T	Collaborative Air Traffic Management Technologies
CAVS	Cockpit Display of Traffic Information Assisted Visual Separation
CbTA	Control by Time of Arrival
CCFP	Collaborative Convective Forecast Product
CD	Concept Development
CDA	Continuous Descent Arrival
CDF / cdf	Cumulative Distribution Function
CDM	Collaborative Decision Making

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CDR	Coded Departure Route
CDTI	Cockpit Display of Traffic Information
CE	Concept Exploration
CIP	Current Icing Product
CIT	Convective Induced Turbulence
CIWS	Corridor Integrated Weather System
CO	Carbon Monoxide
CO2	Carbon Dioxide
COI	Communities of Interest
ConOps	Concept of Operations
CONUS	Continental United States
CoSPA	Consolidated Storm Prediction for Aviation
CSC	Computer Sciences Corporation
CSPR	Closely Spaced Parallel Runways
CTA	Controlled Time of Arrival
CWAM	Convective Weather Avoidance Model
DARP	Dynamic Airborne Reroute Procedures
DASI	Digital Altimeter Setting Indicator
DEP	Departure
DFM	Departure Flow Management
DFW	Dallas Fort Worth International Airport
DME	Distance Measuring Equipment
DOC	Department of Commerce
DOD	Department of Defense
DOT	Department of Transportation
DST	Decision Support Tool
EDCT	Expected Departure Clearance Time
EN	Enabler
ERAM	En Route Automation Modernization
E-RBD	Equity-based Ration-by-Distance
ETE	Estimated Time Enroute

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ETMS	Enhanced Traffic Management system
E-WITI	En-route Weather Impacted Traffic Index
FAA	Federal Aviation Administration
Facilities	Transform Facilities
FAR	Federal Aviation Regulation
Far-Term	2018 – 2025 (Full NextGen)
FAWB	Federal Aviation Weather Board
FCA	Flow Constrained Area
FCFS	First-Come First-Served
FDIO	Flight Data Input/Output
FDR	Flight Data Report
FEA	Flow Evaluation Area
FET	Flow Evaluation Team
FIP	Forecast Icing Product
FIS-B	Flight Information Service-Broadcast
FL	Flight Level
FlexTerm	Flexibility in the Terminal Environment
FMS	Flight Management System
FOC	Flight Operations Center
FSD	Full System Development
FSM	Flight Schedule Monitor
GA	General Aviation
G-AIRMET	Graphical Airman's Meteorological Information
GBAS	Ground-Based Augmentation System
GDP	Ground Delay Program
GNSS	Global Navigation Satellite System
GPS	Global Positioning Satellite
GRASP	Generalized Random Adaptive Search Procedure
GS	Ground Stop
GSE	Ground Support Equipment
GTG	Graphical Turbulence Guidance

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HEMS	Helicopter Emergency Management System
HF	High Frequency
HighDensity	High Density Airports
HITL	Human In The Loop
HPA	High Performance Airspace
HRRR	High Resolution Rapid Refresh
hrs	Hours
I&I	Implementation and Integration
IAH	George Bush Intercontinental Airport
ICAO	International Civil Aviation Organization
ICR	Integrated Collaborative Routing
IDRP	Integrated Departure Route Planning
IDFL	Interactive Dynamic Flight List
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IOC	Interim Operational Capability
IPE	Integrated Program Execution
IPM	Integrated Program Modeling
IR	Infrastructure Roadmap
ITBFM	Integrated Time-Based Flow Management
ITWS	Integrated Terminal Weather System
IWP	Integrated Work Plan
JFK	John F. Kennedy Airport
JMBL	Joint Meteorological and Oceanographic Brokering Language
JMDB	Joint Meteorological and Oceanographic Data Base
JPDO	Joint Planning and Development Office
JPDO WG	Joint Planning and Development Office Working Group
km	Kilometer
LAAS	Local Area Augmentation System
LAHSO	Land And Hold Short Operations

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LAX	Los Angeles International Airport
LIDAR	Light Detection and Ranging
LLWAS	Low Level Windshear Alerting System
LOA	Letter of Agreement
LP	Localizer Performance
LPV	Localizer Performance with Vertical Guidance
LR	Lagrangian Relaxation
LWE	Liquid Water Equivalent
M2M	Machine-to-Machine
MAP	Monitor Alert Parameter
mb	Millibar
MDCRS	Meteorological Data Collection and Reporting System
MEA	Minimum En Route Altitude
METAR	Aviation Routine Weather Report (an hourly surface weather observation)
METOC	Meteorological and Oceanographic
Mid-Term	2010 – 2018 (Transition to NextGen)
MIT	Miles in Trail
MIT/LL	Massachusetts Institute of Technology Lincoln Laboratories
MITRE	The MITRE Corporation
MM	Maxflow/Mincut
MoG	Moderate or Greater
MPA	Mixed Performance Airspace
NAS	National Airspace System
NAS EA	National Airspace System Enterprise Architecture
NASA	National Aeronautics and Space Administration
NASEIM	NAS-Wide Environmental Modeling
NAVAID	Navigational Aid
NCWF-6	National Convective Weather Forecast - 6
NCWP-6	National Convective Weather Product - 6
NDFD	National Digital Forecast Database
Near-Term	Current to 2010

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NetFM	Network Flow Model
NEXTGEN	Next Generation Air Transportation System
NIP	NextGen Implementation Plan
nm	Nautical Mile
NNEW	Next Generation Air Transportation System Network Enabled Weather
NOAA	National Oceanic and Atmospheric Administration
NOTAM	Notice to Airmen
NOx	Nitrogen Oxides
NWP	Numerical Weather Prediction
NWS	National Weather Service
NWX	National Weather Index
NYC	New York Center Airspace
OAG	Official Airline Guide
OAT	Outside Air Temperature
ODNI	On-Demand NAS Information
OEP	Operational Evolution Partnership
OGC	Open Geospatial Consortium
OI	Operational Improvements
OPD	Optimized Profile Descent
ORD	Chicago O'Hare Airport
OTV	Obstructions to Visibility
PAAR	Planned Arrival
PAR	Periodic Auto-Regressive
PCA	Polar Cap Absorption
PCP	Probability Cut-off Parameter
PD	Prototype Development
PDF / pdf	Probability Density Function
PIC	Aircraft
PIREP	Pilot Report
PMF	Probability Mass Function
POET-R	Research Version of the Post Operations Evaluation Tool

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R&D	Research and Development
RAPT	Route Availability Planning Tool
RB	Route Blockage
RBS	Ration-by-Schedule
REDAC	Research Engineering and Development Advisory Committee
RNAV	Area Navigation
RNP	Required Navigation Performance
RPD	Resource Planning Data
RRIA	Reroute Impact Assessment
RTA	Required Time of Arrival
RUC	Rapid Update Cycle
RVR	Runway Visual Range
RWI	Reduced Weather Impact
SAA	Special Activity Airspace
SAAAR	Special Aircraft and Aircrew Authorization Required
SAMS	Special Use Airspace Management System
SAS	Single Authoritative Source
SAWS	Stand Alone Weather Sensor
SBAS	Satellite-Based Augmentation System
SBS	Surveillance Broadcast Services
S-CAOSS	Super Computer Aided Operational Support System
SCG	Stochastic Congestion Grid
SDF	Louisville International-Standiford Airport
SDO	Super Density Operations
SEP	Solar Energetic Particles
SESAR	Single European Sky Air Traffic Management Research
SEVEN	System Enhancement for Versatile Electronic Negotiation
sfc	Surface
SFO	San Francisco International Airport
SID	Sudden Ionospheric Disturbance / Standard Instrument Departure
SIGMET	Significant Meteorological Information

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ATM-Weather Integration Plan

SIT	System-Integrated TMI
SM	Statute Mile
SME	Subject Matter Expert
SOA/IT	Service Oriented Architecture
SoG	Severe or Greater
SOP	Standard Operating Procedure
SOx	Sulfur Oxides
SSE	Safety, Security, and Environmental
STAR	Standard Terminal Arrival
STL	St Louis International Airport
SUA	Special Use Airspace
SWIM	System-Wide Information Management
T Routes	Trajectory Routes
TAF	Terminal Area Forecast
TBD	To Be Determined
TBO	Trajectory Based Operations
TDWR	Terminal Doppler Weather Radar
TFDM	Trajectory Flight Data Management
TFM	Traffic Flow Management
TFMS	Traffic Flow Management System
TM	Traffic Manager
TMA	Traffic Management Advisor
TMC	Traffic Management Coordinator
TMI	Traffic Management Initiative
TMU	Traffic Management Unit
TRACON	Terminal Radar Approach Control
TRL	Technology Readiness Level
TSD	Traffic Situation Display
T-WITI	Terminal Weather Impacted Traffic Index
UAT	Universal Access Transceiver
US	United States

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VFR	Visual Flight Rules
VHF	Very High Frequency
VMC	Visual Meteorological Conditions
VOLPE	Volpe Center / Volpe National Transportation Systems Center
WAAF	Weather Avoidance Altitude Field
WAAS	Wide-Area Augmentation System
WAF	Weather Avoidance Field
WAIWG	Weather Air Traffic Management Integration Working Group
WATRS	Western Atlantic Track Route System
WIST-1	Weather Integration Sub Team Number 1
WITI	Weather Impacted Traffic Index
WITI-B	Weather Impacted Traffic Index for Sever Weather
WMO	World Meteorological Organization
WP2	Work Plan 2
WRF	Weather Research and Forecasting Model
WTIC	Weather Technology in the Cockpit
WTMD	Wake Turbulence Mitigation for Departures
WV	Wake Vortex
Wx	Weather
XML	Extensible Markup Language
ZTL	Atlanta Air Route Traffic Control Center