

~ Working File ~
NYNJPHL Airspace Redesign Implementation Schedule - FY09 Q2

PLEASE READ BEFORE READING IMPLEMENTATION SCHEDULE

Schedule Overview:

The New York/New Jersey/Philadelphia Metropolitan Area Airspace Redesign Implementation Plan (Plan) describes the tasks necessary to implement the Airspace Redesign project. Implementation is scheduled to take place in four (4) stages. The planned end dates for each stage are:

- Stage 1—March 6, 2009
- Stage 2—October 1, 2009
- Stage 3—November 9, 2011
- Stage 4—September 7, 2012

Schedule Status:

The schedule status is identified by 5 indicators. The indicator used is based on the planned end dates identified above and the estimated time duration of the task/deliverable. Each stage is programmed with the planned end date so anything that is estimated to finish beyond that date will show red.

- Green Light: Complete as of Current Date.
- Blue Light: Pending (not started yet or started and on time)
- Yellow Light: Potential of Delay
- Red Light: Behind the Stage Schedule
- Red Flag: Not Started But Start Date Past the Current Date

For example, in Stage 1 the PHL-Rwy 09/27 Departure Dispersal Headings are complete, but because a 12 month post-implementation data collection is not complete until 7/23/09 and the planned overall Stage was to be complete on March 6, 2009, the overall deliverable is red.

Reformatting Changes

Beginning in January 2009, the plan has been reformatted and reduced from approximately 14,000 line items to approximately 9,600. This was accomplished by removing non-applicable tasks reducing the task depth, which results in more clearly identified airspace deliverables. Additionally, the reformatting includes identifying the route changes into and out of Philadelphia as '*Stage 2B – PHL Arrival/Departure Route Changes*'. Stage 4 was also grouped into 5 identifiable deliverable categories. This document is different from the first quarter document in that all tasks have a category and each category is more clearly identifiable.

The term Continuous Descent Approach (CDA) has been changed to Optimal Profile Descent (OPD)

Stage 1 Accomplishments and Status: The Stage 1 planned end date was 3/6/09. Tasks that are red indicate that it is in process but will be completed beyond 3/6/09.

Dispersal Headings:

- EWR: Runway 22 Dispersal Headings 215 and 239 for demand to have been implemented. When no demand, 190 heading is issued.
- PHL (props and jets) Dispersal Headings:

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- Runway 09L/R Dispersal Headings for jets between 0800-1100 and 1400-2000, 081 and 096 headings are used. Outside of the designated hours, 085 heading is used.
- Runway 27L Dispersal Headings for jets between 0800-1100 and 1400-2000, 245 and 268 headings are used. For props daily pre-coordinated heading 220 – 230. Outside of the designated hours, 255 heading is used.
- LGA:
 - Runway 31 Dispersal Headings 340 and 359 currently being used.
 - Runway 04 Dispersal Headings will not be implemented until Stage 4 when the arrival routes shift.

Stage 1 Procedure Development:

- JFK:
 - Rwy 21R Right Turn Departure – Conventional (Cancelled Safety Risk Management HI)
 - Rwy 13 L/R CRI Approach – In a feasibility study (In progress and red)
 - PARCH STAR – In development for a chart date of 12/17/09 (In progress and red)
- PHL--Runway 9L/R River Visual Approach Procedure – RNAV/RNP Overlay Procedure in feasibility study. (In progress and red)
- LGA—Runway 22 RNAV LOC LDA Approach in development (In progress and red)
- TEB
 - Runway 24 RUUDY 2 RNAV for Departures--Revised chart date 10/22/09. (In progress and red)
 - Runway 24 LPV - RNAV Overlay Approach Procedure (On hold to determine priority-Red)
 - Runway 24 RNAV Overlay Approach Procedure (On hold to determine priority-Red)
 - Runway 19 LPV - RNAV Overlay Approach Procedure (On hold to determine priority-Red)
 - Runway 19 RNAV Overlay Approach Procedure (On hold to determine priority-Red)

Stage 2 Accomplishments and Status: The Stage 2 planned end date is 10/1/09. For tasks that have started and will finish beyond 10/1/09 are indicated as red. For tasks that have not started but because of the current date and the task duration that status is indicated by a red flag. Blue indicates that the task has not started or has started and is on time.

- **Stage 2A Westgate Expansion:** We are finishing up the design process with 5 options, and they will be tested during April and May 2009
- **Stage 2B PHL Arrival Departure Route Changes:**
 - This deliverable consists of establishing a new arrival route into PHL and establishing a third westbound departure fix for PHL.
 - We are in the procedure development stage for 2 Standard Terminal Arrival Routes (STARs) and 4 Standard Instrument Departures (SIDs). The STARs are scheduled for charting on 10/22/09 and the SIDs are scheduled for charting on 12/17/09.

Stage 3 and 4 Status: A planning working group meeting is scheduled for 4/20/09

Line Items Overview (Left Pane):

The Plan only shows the main tasks required to implement the Airspace Redesign. Many subtasks are hidden because they are composed of steps that recur each time the subtask is done. As an example, the development of an RNAV procedure is an 18 step process that is used each time an RNAV procedure is developed. Other subtasks that are comprised of a generic list of steps include: Procedure Development, Safety Risk Management, Spectrum Analysis, Business Case Analysis, Human-in-the-Loop Experiments, Airspace Implementation, and F&E Schedules. The schedule status indicator shows the status of each task that helps the project manager to take appropriate actions.

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Schedule Bar Chart (Right Pane) and Legend:

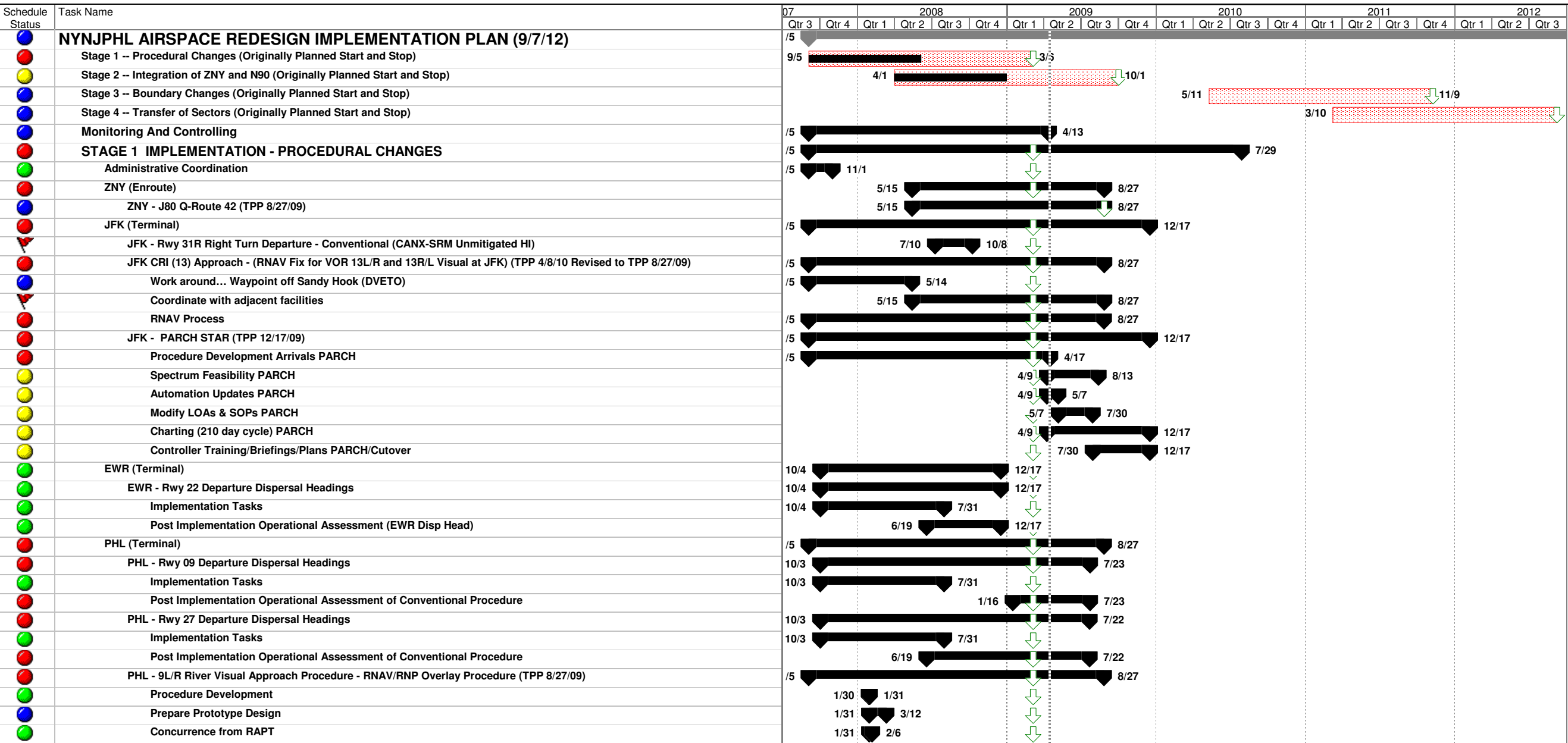
Most of the bars appear as black because they are comprised of many subtasks. Each of the main tasks has a milestone subtask that indicates the completion point. The milestone tasks are shown as blue diamonds. Each main task also has a critical path that is comprised of subtasks that impact the total duration of the main task. Many milestones and critical tasks do not appear on the Plan because they are included in the subtasks under the main tasks. The planned end-date of each stage is shown as a green arrow.

Caveat:

The schedule is dependent on the resources available, design refinements, and the completion dates of earlier tasks; therefore, the schedule is subject to change. The Implementation schedule will be updated periodically and posted on the project website. Look for the next update in the Third Quarter of FY 2009 (June 2009)

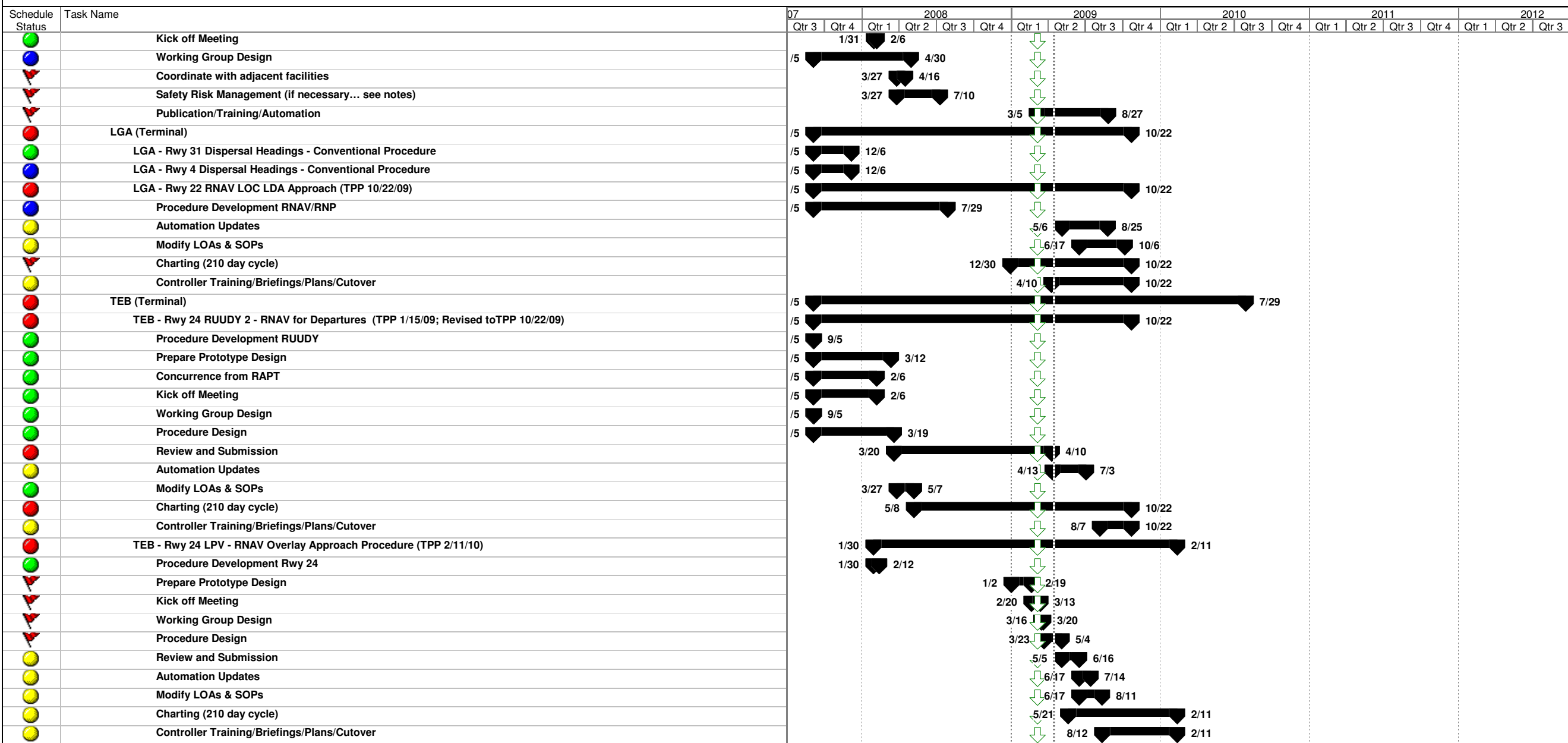
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 (Time-Line in Calendar Years)

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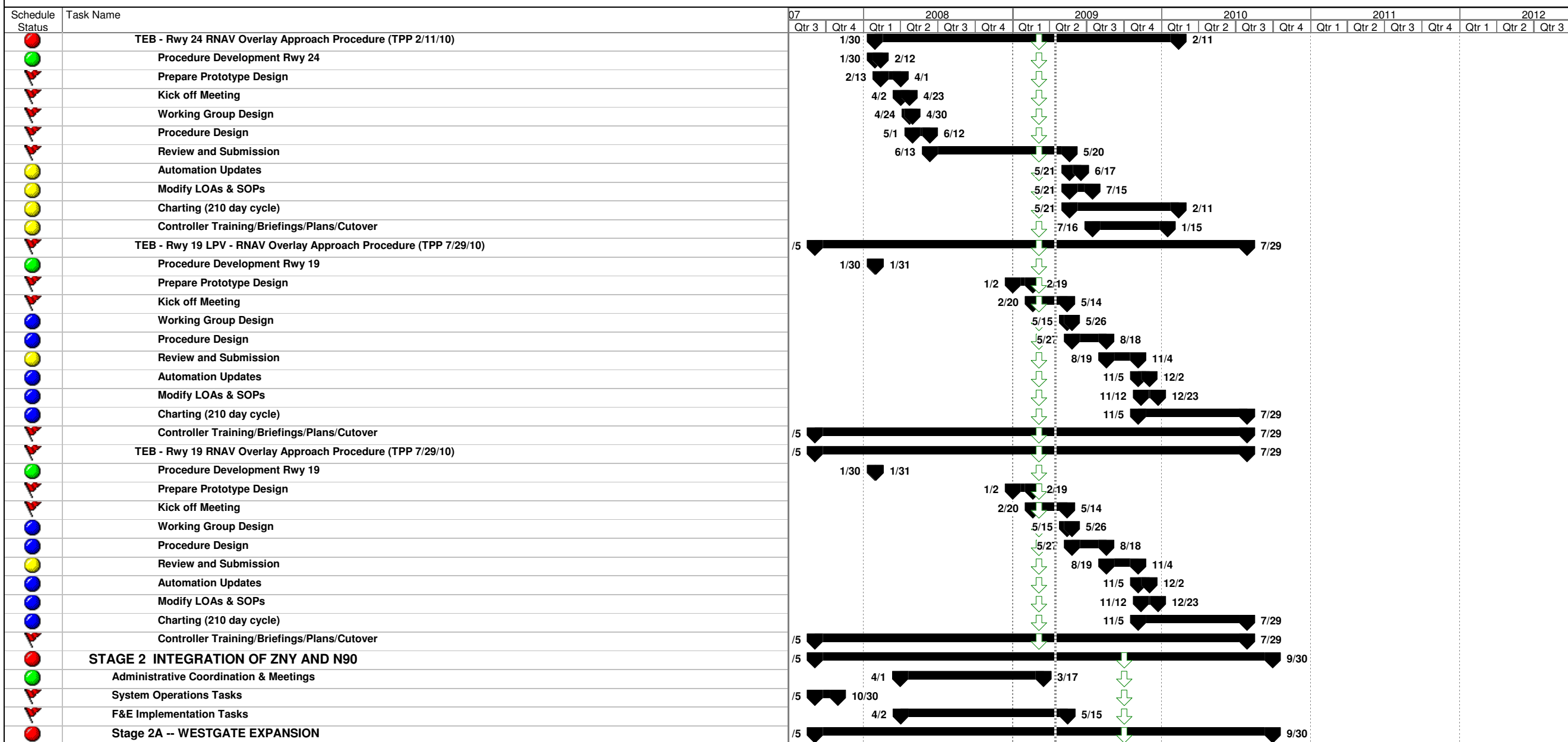
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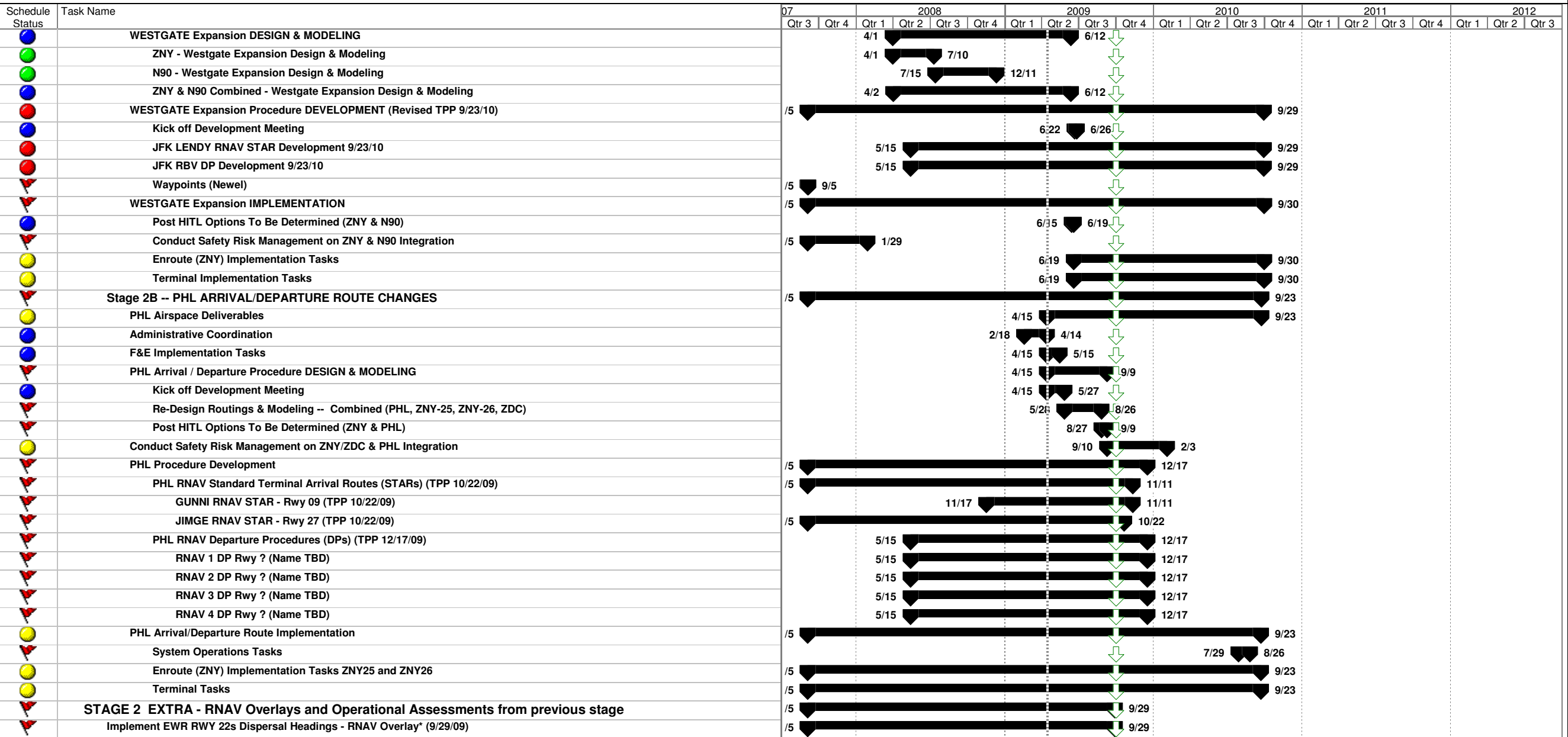
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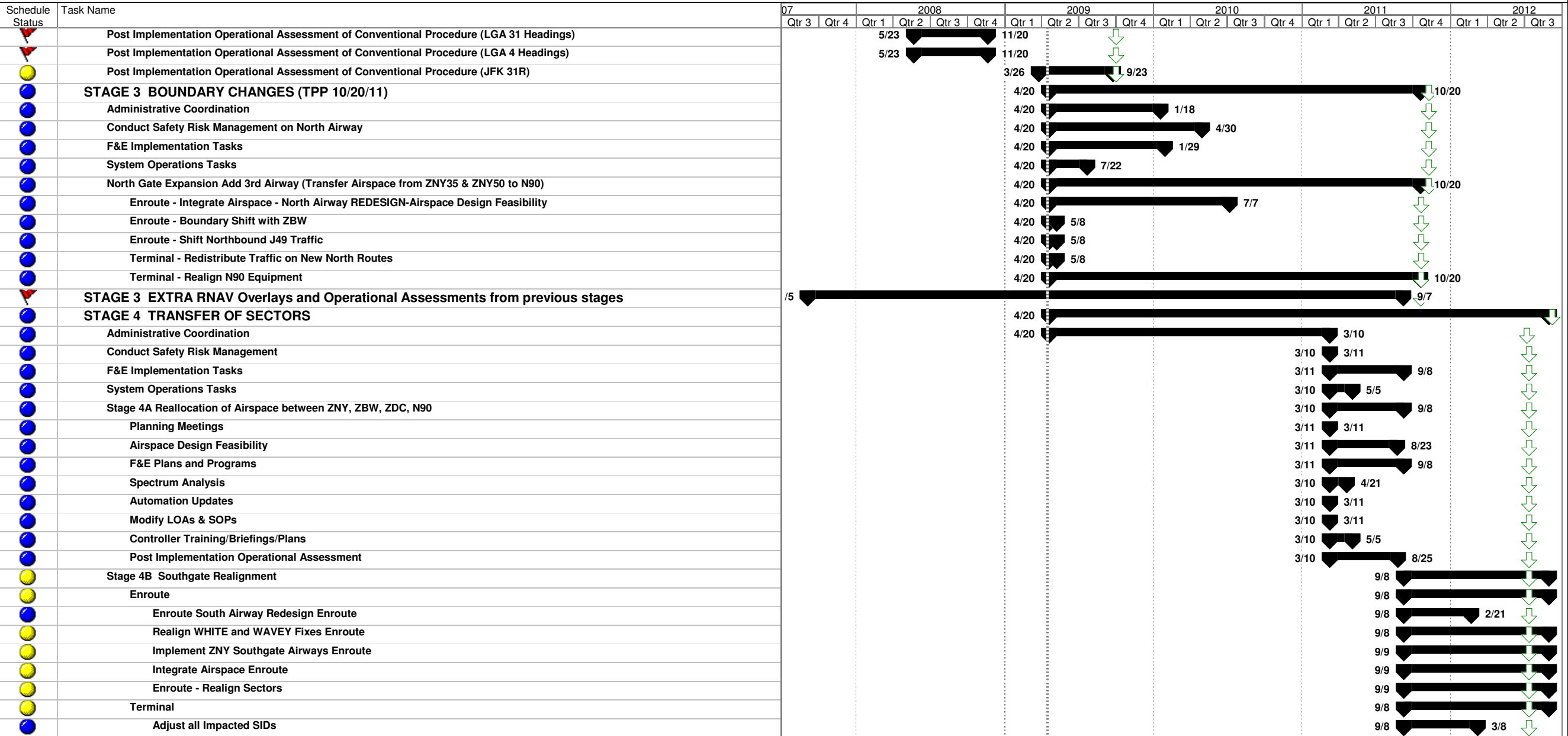
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Schedule Status	Task Name	07	2008				2009				2010				2011				2012					
			Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3					
Yellow	Reroute Traffic to WHITE and WAVEY Depending on City Pairs																	9/8						
Yellow	Re-Align Sectors																	9/8						
Yellow	Stage 4C Eastgate Realignment																	9/8						
Yellow	Enroute																	9/8						
Blue	East Airway Redesign Enroute																	9/9						6/7
Yellow	Integrate Airspace Enroute																	9/9						
Yellow	Realign Sector Equipment																	9/9						
Yellow	Terminal																	9/8						
Blue	Reroute to allow EWR to access BETTE/HAPIE																	9/9						6/5
Blue	Shift LGA East Departures to the East (for LGA Arrivals from the North)																	9/8						6/5
Yellow	Shift HPN East Departures to the East																	9/8						
Yellow	Shift JFK East Departures to the East																	9/8						
Blue	Adjust all other impacted SIDs																	9/8						6/5
Yellow	Reroute NY traffic to the Eastgate																	9/8						
Yellow	Reroute NY Airport to Destinations in Northern ZBW to E1																	9/9						
Yellow	Reroute NY Airports to Destinations in Eastern ZBW to E2																	9/9						
Yellow	Reroute BOS Traffic to E3 (Routed to BAYYS rather than MERIT)																	9/8						
Yellow	Reroute PVD and Cape Cod Area to E3A																	9/8						
Yellow	Reroute PHL traffic to the Eastgate																	9/8						
Yellow	Reroute PHL Departures for North Atlantic Routes and Eastern ZBW locations via PHL-E1																	9/9						
Yellow	Reroute Remaining PHL Departures on PHL-E2																	9/8						
Yellow	Re-Align Sector Equipment																	9/9						
Yellow	Stage 4D Southgate & Eastgate Terminal Tasks (Supporting South and East Gates)																	9/8						
Blue	EWR																	9/8						6/5
Blue	EWR - Reroute Northside Prop Arrivals at EWR																	9/8						6/5
Blue	EWR - Reroute EWR WATRS Arrivals to Join PHLBO2 at FAK																	9/8						6/5
Blue	EWR - Eliminate BREZY from Departure Procedures at EWR**																	9/8						6/5
Blue	EWR - Reroute EWR PENNS Arrival Stream																	9/8						6/5
Blue	EWR - Reroute EWR Arrivals from ZDC and ZBW																	9/8						6/5
Blue	TEB																	9/8						6/5
Blue	TEB - Reroute TEB/MMU West arrival streams to the South																	9/8						6/5
Blue	TEB - Shift TEB/MMU FLOSI arrivals to the East**																	9/8						6/5
Blue	JFK																	9/8						6/5
Blue	JFK - Reroute JFK Pacific Rim Arrivals to the East via Canada																	9/8						6/5
Blue	ISP																	9/8						6/5
Blue	ISP - Shift Southern Arrivals to the West																	9/8						6/5
Yellow	LGA																	9/8						
Yellow	LGA - Redesigning LGA Arrivals																	9/8						

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Blue	Reroute JFK South America and Caribbean Arrivals via CAMRN																							9/8	6/5	
Blue	Ocean Departures																								9/8	6/5
Blue	New distant procedures for aircraft heading to the Ocean departure gate																								9/8	6/5
Blue	ISP - Redesigning ISP Arrivals/Departures																								9/8	6/5
Blue	Reroute ISP Southern Departure Streams (create one stream)																								9/8	6/5
Blue	New Departure Procedures for ISP																								9/8	6/5
Blue	LGA - Redesigning LGA Arrivals/Departures																								9/8	6/5
Blue	Shift LGA North departures further north for EWR Space																								9/8	6/5
Blue	Realign approaches from the South																								9/8	6/5
Blue	Realign approaches from the North																								9/8	6/5
Blue	LGA Southern Arrival RNAV Overlay to RWY 22																								9/8	6/5
Blue	LGA Southern Arrival RNAV Overlay to RWY 31																								9/8	6/5
Blue	Apply Altitude Restriction on LGA to Separate NY and PHL Traffic																								9/8	6/5
Blue	HPN - Redesigning HPN Arrivals/ Departures																								9/8	6/5
Blue	Shift Arrival Streams																								9/8	6/5
Blue	Remove Northeast Detour from BOUNO STAR for HPN																								9/8	6/5
Blue	Reroute HPN North and East Arrivals over IGN to the East																								9/8	6/5
Blue	Shift Departure Streams																								9/8	6/5
Blue	Reroute HPN Eastern Departures (shift South)																								9/8	6/5
Blue	Reroute HPN Southern Departure Streams to the West																								9/8	6/5
Blue	Reroute HPN Northern and Western Departure Flows to the northeast																								9/8	6/5
Blue	Establish Departure Procedures for HPN																								9/8	6/5
Blue	RNAV Overlay Procedures for HPN RWY 34 to J75 Departures																								9/8	3/20 6/5
Blue	RNAV Overlay Procedures for HPN RWY 34 to ZNY Southgate Departures																								9/8	6/5
Blue	RNAV Overlay Procedures for HPN RWY 34 to ZNY Northgate Departures																								9/8	6/5
Blue	RNAV Overlay Procedures for HPN RWY 34 to ZNY Westgate Departures																								9/8	6/5
Blue	RNAV Overlay Procedures for HPN RWY 34 to ZNY Eastgate Departures																								9/8	6/5
Blue	PHL - Redesigning PHL Arrivals/Departures																								9/8	6/5
Blue	Create Optimal Profile Descent Procedures (Optimal Profile Descnet-OPD)																								9/8	6/5
Blue	All fixes to 27 (RNAV)																								9/8	6/5
Blue	All fixes to 09 (RNAV)																								9/8	6/5
Yellow	Stage 4F General Integration Tasks																								9/8	6/5
Blue	TEC (Tower Enroute Control) Adjustments																								9/8	6/5
Blue	Change Altitude Restrictions for V3 to Cross SBJ at 6,000																								9/8	6/5
Blue	Satellite Airports (23 EIS Study Airports)																								9/8	6/5
Blue	De-conflict New Arrival Procedures at Satellite Airports																								9/8	6/5
Blue	De-conflict New Departure Procedures at Satellite Airports																								9/8	6/5
Blue	Reroute SWF Arrival Route from ZDC																								9/8	6/5

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	Realign OXC, BDR and HVN Arrivals and Departures																						
	Reroute J42 to BOS (and Satellites) to the East																						
	Reroute BOS (and Satellites) Southwest Departure Routes West of BDR																						
	Westgate Finalization (Refer to Stage 2) (6th Fix)																						
	Dual J80 Route from Westgate Fix (rather from BRNAN) Dual J80 Route																						
	Review and Design a 6th Westgate Departure Fix																						
	Create Q Routes over Existing Westgate Jet Routes and Join up with Western Q Routes																						
	Redistribute Western Jet Routes on New Q Routes																						
	Redistribute J60 and J64 traffic to W1, W2, and W3																						
	Reroute NY Departures (ZOB and ORD Satellites) to W2																						
	Reroute PHL Departures (Pacific and NW) to W2																						
	Reroute NY Departures for J60 and DEN to W3																						
	Reroute PHL Departures for ORD to W3																						
	Move NY Departures for J64 and J80 to W4																						
	Move PHL departures for J80, West Coast and DTW to W4																						
	Shift DCA/BWI Arrival Routes from ZBW																						
	Post Implementation Benefits Analysis of Stage 1																						
	Post Implementation Benefits Analysis of Stage 2																						
	Post Implementation Benefits Analysis of Stage 3																						
	Post Implementation Benefits Analysis of Stage 4 and the Overall Project																						

Acronyms Related to Airspace Redesign Project

ARD Yardley VOR
ARTCC Air Route Traffic Control Center
BDR Bridgeport VOR
BWI Baltimore Washington International Airport
CDA Continuous Decent Approach
DCA Reagan National Airport
DTW Detroit International Airport
EIS Environmental Impact Statement
ERAM Enroute Automation Modernization
EWR Newark International Airport
FEIS Final Environmental Impact Statement
FPO Flight Procedures Office
FQM Williamsburg VOR
GPS Global Positioning System
HAR Harrisburg VOR
HITL Human in the Loop
HPN White Plains/Westchester County Airport
IAD Dulles International Airport
IFR Instrument Flight Rules
ILS Instrument Landing System
ISP Long Island MacArthur Airport
JFK JFK Airport
LDA Localizer Directional Aid
LIB Liberty Sector
LOA Letters of Agreement
LOC Localizer
LPV A type of approach with vertical guidance based on WAAS, published on RNAV (GPS) approach charts
MMU Morristown Airport
MXE MODENA (Departure Fix for PHL & its Satellites)
N90 New York TRACON
NAP Needs Assessment Program
OOD Woodstown VOR
OPD Optimal Profile Decent
PCT Potomac TRACON
PHL Philadelphia Airport
PTW Pottstown VOR
RAPT Regional Airspace Procedure Team
RBV Robinsville VOR
RNAV Area Navigation
RNP Required Navigational Performance
ROD Record of Decision
ROMA Route Optimization and Mitigation Analysis
RWY Runway
SID Standard Instrument Departure
SMS Safety Management System
SOP Standard Operating Procedures
SRM Safety Risk Management
SRMD Safety Risk Management Document
STAR Standard Terminal Arrival Route
SWAP Severe Weather Avoidance Plan
TEB Teterboro NJ Airport
TEC Tower En-route Control
TMA Traffic Management Advisor
TPP Terminal Procedures Publication
TRACON Terminal Radar Approach Control

VCN Cedar Lake VOR
VFR Visual Flight Rules
VHF Very high Frequency
VOR VHF Omni-directional Radio Range Station
ZBW Boston ARTCC
ZDC Washington ARTCC, Leesburg, VA
ZID Indianapolis ARTCC
ZNY New York ARTCC
ZOB Cleveland ARTCC
WAAS Wide Area Augmentation System