Runway Safety Area Enhancements
Runway 1-19

Public Information Workshop  Environmental Assessment Scoping
Purpose of Scoping

- Solicit input from agencies and the public
- Identify significant environmental issues to be analyzed in greater depth
- Eliminate from detailed study issues that are insignificant or have been covered by prior environmental review
- Set temporal and geographic boundaries for impact analysis
- Identify available technical information and additional reasonable alternatives, if any
- Identify necessary permits, licenses, approvals, authorizations
- Clarify areas of special expertise
## Runway Safety Area (RSA) Enhancements

### Runway 1-19

#### DCA Airport Layout Plan

### Runway Safety Area Determination

<table>
<thead>
<tr>
<th>No.</th>
<th>Standard RSA</th>
<th>Modified RSA</th>
<th>FAA Standard RSA</th>
<th>Existing Condition</th>
<th>Proposed Action</th>
<th>Date Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1000'</td>
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<td>1000'</td>
<td>1000'</td>
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### Clearances

- **Group IV Taxiway**
  - 182 Feet
  - Can be Improved (02/21/07)

### Future Taxiway Object Free Area (TOFA)

- **Future R**
  - 3.5'
  - 4' x 1
  - 1.6' MSL

### Potomac

- **RPZ**
  - 1.6' MSL
  - 31'N

### Holding Apron

- **RSA**
  - 50'
  - 4' x 1
  - 8' MSL

### Holding Bldg.

- **RSA**
  - 50'
  - 4' x 1
  - 8' MSL

###仨

- **SOUTH BOATHOUSE**
  - 100'
  - 10.
  - 4)

#### NOTE

- **EA**
  - PROPOSE
  - RE
  - 51': 3
  - 0.2
  - 77 02
  - 01'59.93" W
Opened in 1941

860 acres

3 Runways
  • 1-19 (primary runway)
  • 4-22 (crosswind runway)
  • 15-33 (crosswind runway)

44 airline gates

73 nonstop destinations
  • 67 nonstop destinations within 1,250 miles

18.7 million passengers in 2007 (ranked 27th in US)

275,000 operations in 2007
In order to comply with Federal Aviation Administration (FAA) Order 5200.8 and FAA Advisory Circular 150/5300-13, the Authority is examining the configuration of the Runway 1-19 Runway Safety Area (RSA) at Ronald Reagan Washington National Airport.

The proposed enhancements to the Runway 1-19 RSA will bring the RSA into compliance by the 2015 FAA deadline.
Definition: A defined surface surrounding the runway intended to provide a measure of safety in the event of an aircraft’s excursion from the runway by significantly reducing the extent of personal injury and aircraft damage during overruns, undershoots, and veer-offs.

Standard RSA Dimensions for Aircraft Using DCA

- 500 feet wide
- 600 feet prior to the landing threshold
- 1,000 feet beyond the runway end

Compliance

- Deadline is 2015 (2006 Transportation Appropriations Act)
- Congress and Department of Transportation (DOT) Office of Inspector General continually monitor FAA and airport progress
RUNWAY 1-19 (6,869 FT)

Standard RSA Design Dimensions

**NORTH FLOW – RUNWAY 1 ARRIVALS AND DEPARTURES**

**SOUTH FLOW – RUNWAY 19 ARRIVALS AND DEPARTURES**

**Legend**

- Runway with Authority’s Preferred Alternative
- Existing Runway Pavement
Runway Safety Area (RSA) Enhancements

Runway 1-19

Aerial Photograph

Existing Conditions
Authority’s Preferred Alternative

Runway 1-19

Using Declared Distances to maintain the effective runway length at its current length of 6,869 feet.

- Authority’s Preferred Alternative
- Resurface Existing Runway 1-19 Pavement
- Relocate 800’, 900’, and 1000’ Approach Light Bars
- Reroute Service Road
- Relocate Centerline Bars and Flashers on Existing Approach Light Piers
- Taxiway J Extension
- Hold Apron Extension
- Relocated Glide Slope
- 300’ Runway Pavement Extension
- RSA
- North Flow Arrivals/Departures (6,869’)
- South Flow Arrivals/Departures (6,869’)
Conceptual Aerial Photograph

With Authority’s Preferred Alternative
Authority’s Preferred Alternative

Standard RSA Design Dimensions Using Declared Distances

- **NORTH FLOW – RUNWAY 1 ARRIVALS AND DEPARTURES**
  - Runway 1-19
  - Declared Distance: 6,869 FT
  - Runway 1 Threshold (Relocated)
  - End of Declared Distance: 500 FT

- **SOUTH FLOW – RUNWAY 19 ARRIVALS AND DEPARTURES**
  - Runway 1-19
  - Declared Distance: 6,869 FT
  - Runway 19 Threshold (No Change)
  - Runway End (No Change)
  - End of Declared Distance: 500 FT

**Legend**
- RSA with Authority’s Preferred Alternative
- Existing Runway Pavement
- Runway Pavement Extension
- Existing Runway Pavement not Used (in North Flow)
- Extended Runway Pavement not Used (in South Flow)
**NEPA Environmental Assessment**

**Process and Approximate Timeline**

- **Agency Meetings and Public Scoping**
  (June 30 – August 15, 2008)

- **Prepare Environmental Assessment**
  Contents Include:
  - Purpose and Need
  - Alternatives
  - Affected Environment
  - Environmental Consequences/Cumulative Impacts
  - Mitigation

- **DRAFT ENVIRONMENTAL ASSESSMENT**

- **Public Workshop and Review Period**
  (45 days)

- **Respond to comments and questions**

- **FINAL ENVIRONMENTAL ASSESSMENT**

- **FAA FINDING ISSUED AND AVAILABLE TO PUBLIC**
**Key Elements of NEPA EA**

**PURPOSE AND NEED** – identifies the problem (need for action), the proposed solution (purpose of action), and the proposed timeframe

**PROPOSED ACTION** – describes the solution

**ALTERNATIVES** – compares the no action and reasonable action alternatives

**AFFECTED ENVIRONMENT** – describes the environmental resources the proposed action and its reasonable alternatives, if any, are likely to affect

**ENVIRONMENTAL CONSEQUENCES** – provides concise analyses for the potential environmental impacts that the no action, proposed action and its reasonable alternatives, if any, may cause, including cumulative impacts

**MITIGATION** – describes the conceptual measures proposed to mitigate the identified environmental impacts
Environmental Impact Categories

- Air Quality
- Coastal Resources
- Compatible Land Use
- Construction Impacts
- DOT Act: Section 4(f)
- Farmlands
- Fish, Wildlife, and Plants (Listed threatened or endangered species or critical habitat)
- Floodplains
- Hazardous Materials, Pollution Prevention, and Solid Waste
- Historical, Architectural, Archeological, and Cultural Resources
- Light Emissions and Visual Impacts
- Natural Resources and Energy Supply
- Noise
- Secondary (Induced) Impacts
- Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks
- Water Quality
- Wetlands
- Wild and Scenic Rivers
Limits of Physical Disturbance (LPD)

- Runway Safety Area (RSA) Enhancements
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- Limits of Physical Disturbance
- Reroute Service Road
- Relocate 800’, 900’ and 1000’ Approach Light Bars
- Hold Apron Extension
- Resurface Runway
- Taxiway J Extension
- 300’ Runway Pavement Extension
- Relocated Glide Slope
Environmental Impact Categories

Within the Limits of Physical Disturbance

Note: The existence and extent of floodplains and wetlands in the vicinity of the Limits of Physical Disturbance are being determined.

Legend

- Limits of Physical Disturbance
- Approximate Coastal Zone Resource Protection Area
- Hazardous Materials – South Investigation Site
Runway Safety Area (RSA) Enhancements
Runway 1-19

Legend:
- Interstate Highway
- Jurisdictional Boundary
- Major Road
- Noise Exposure Contours (expressed in DNL)

Generalized Existing Land Use
- Residential
- Commercial
- Mixed Use
- Industrial
- Government
- Parks and Recreation
- Water

DNL = Day-Night Average Sound Level - A metric used to describe the existing and predicted cumulative noise exposure for communities surrounding the Airport. DNL is expressed in A-weighted decibels (dBA) and represents the average noise level over a 24-hour period. In calculating DNL, the average sound level for each hour during the nighttime period (10:00 p.m. to 7:00 a.m.) is increased by a 10-decibel weighting penalty.

Noise Exposure Contours (expressed in DNL)
- DNL 65
- DNL 70
- DNL 75

Sources: Wyle Laboratories and AirPhoto USA
Prepared by: Ricondo & Associates, Inc. and Geotrack, Inc.
Drop comment forms in box at the Workshop

Mail comments for delivery by 5:00 PM Eastern Time, August 15, 2008 to:

Charles Baummer  
Metropolitan Washington Airports Authority  
Planning Department  
One Aviation Circle  
Ronald Reagan Washington National Airport  
Washington, DC 20001-6000

Email comments by 5:00 PM Eastern Time, August 15, 2008 to:  
environmental.comments@mwaa.com