NAS operations Dashboard



NOD - Pathfinder/Alternate Route tool

 The NAS Operations Dashboard (NOD) has developed capabilities for the flight operator to input flights that it considers suitable to take alternate routes if the need arises.

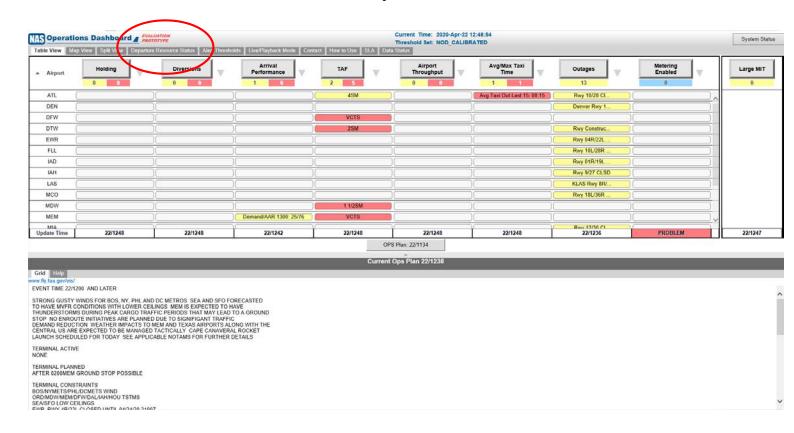
• This will be available in May of 2020 for the Washington DC metro area airports.

Pathfinder/Alternate Route tool Capabilities

- The pathfinder tool
 - Allows the operator to input flights ready and willing to take an alternate route.
 - Inform the operator that the flight was selected by the facility.
 - Follow the flight once airborne to see if it was successful along the route.

Accessing the Pathfinder/Alternate Route tool

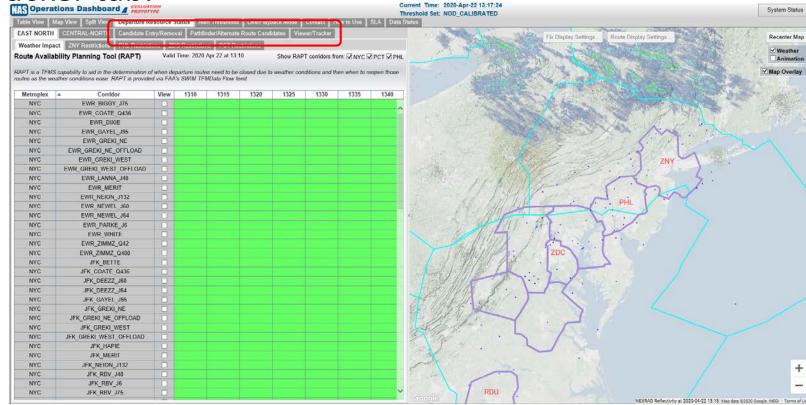
• Access to the Pathfinder/Alternate Route tool is gained through the Departure Resource Status Tab in the NAS Operations Dashboard.



Inputs

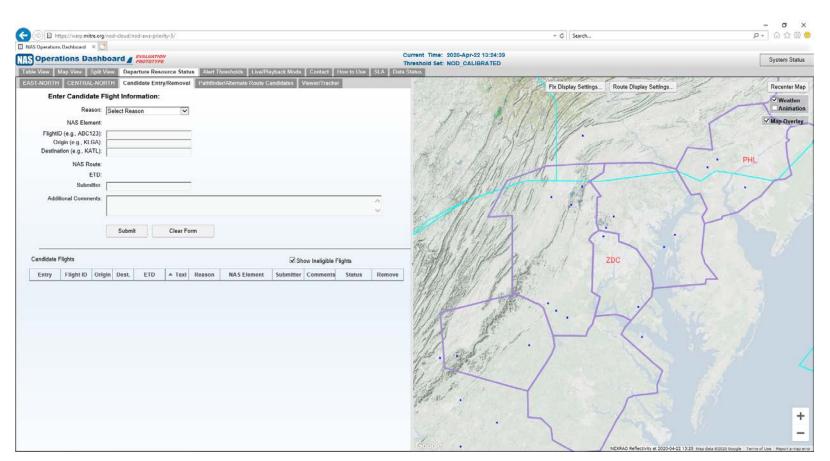
 Through the Departure Resource Status Tab you will find the Candidate Entry/Removal tab, Pathfinder/Alternate Route Candidates

tab, and Viewer Tracker tab.



Inputs - Candidate Entry/Removal

- Enter the request in the Candidate Entry/Removal tab
 - Select the reason
 - Pathfinder
 - Low Altitude Routes
 - Fix Balancing
 - Priority Flight.



Inputs – Candidate Entry/Removal

Pathfinder

 By selecting Pathfinder, the NAS element will appear and the user can select the airways or the fixes that the flight will be willing and able to take.

Low Altitude Routes

 By selecting Low Altitude Routes, the NAS Element will populate with the different low altitude routes that the flight will be willing and able to take.

Fix Balancing

 By selecting Fix Balancing, the NAS element will appear and the user can select the fixes that the flight will be willing and able to take.

Priority Flight

• By selecting Priority Flight, there will be no NAS element populated, but the additional comments field will be required to be completed.

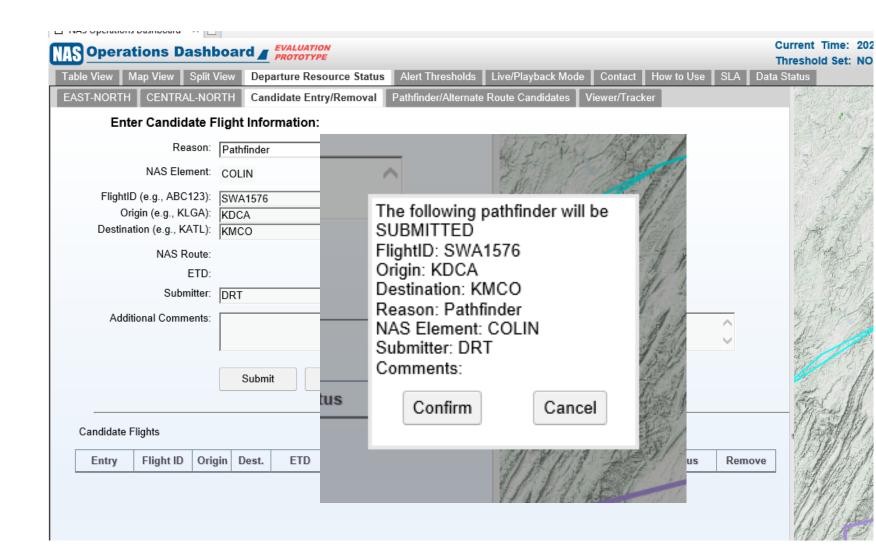
Entering a Pathfinder – Option 1 example

- Let's assume COLIN (the normal route for this flight) is impacted by weather and the facility has closed that fix but has asked for a pathfinder. To tell traffic management that a particular flight is available as a pathfinder:
 - We enter SWA 1576 as a pathfinder over COLIN by selecting that fix in the NAS element
 - Fill in the appropriate data boxes for flight and city pair
 - Submitters initials
 - Enter any additional comments relevant to the flight (optional)
 - Submit the request.

(See Slide 6 for screen showing data entry fields.)

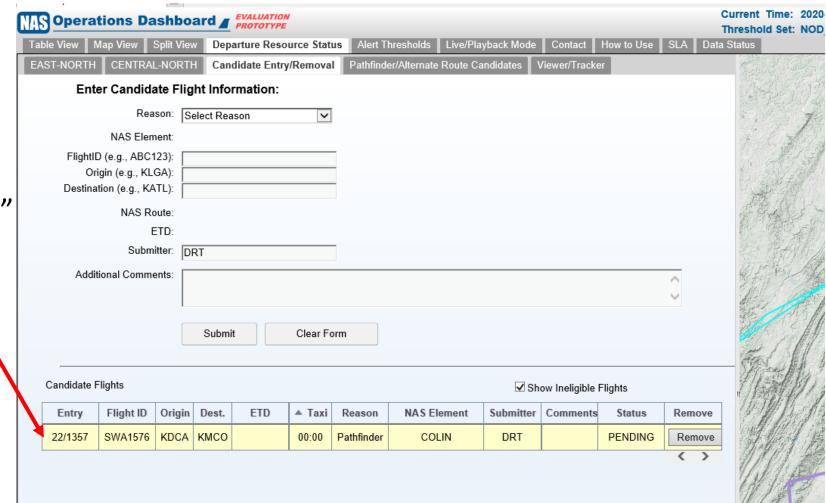
Entering a Pathfinder - Example from last slide

 Once submitted a confirmation box will appear and you can Confirm or Cancel the entry



Entering a Pathfinder – Option 1 example

 If you confirm it, the request will then appear on the list of candidates as "PENDING"



Entering a Pathfinder

- The flight shows up as pending until the NOD tool finds the flight plan
 - When flight plan is found, the status is turned to Eligible
 - If the flight is not found, the status is turned to Not Found.
- Listening to the Hotline would be the only way to find out if a flight got selected. Once the flight is airborne the status changes to Departed.

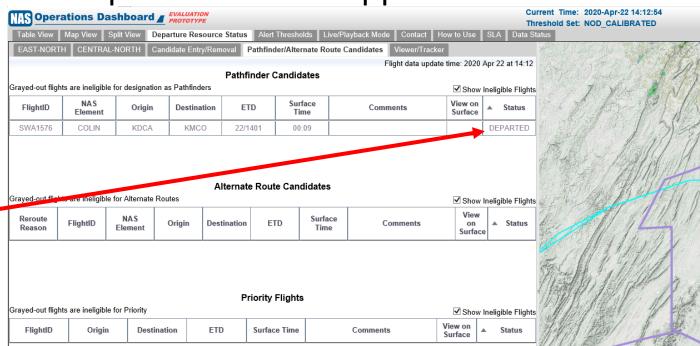
Pathfinder/Alternate Route Candidates

 The FAA facilities will see the list of candidates on the Pathfinder/Alternate Route Candidates screen and approve those they are able to approve over the hotline.

• In this case the flight we offered as a pathfinder was approved on this

new route by the traffic manager for use as a pathfinder as heard on the Hotline.

 It has departed on this route.



Entering a Pathfinder – Option 2

- There is another option to enter a pathfinder request.
- By viewing the surface map of the airport and clicking on the flight which you would like to submit as a potential pathfinder, a box will populate in the lower right of the screen. The operator can click "Create a Candidate," and it will take them to the Candidate Entry/Removal tab which was shown on Slide 6.
- By utilizing this option, much of the form shown on Slide 6 is prefilled and the operator would only have to add the Reason and NAS element.

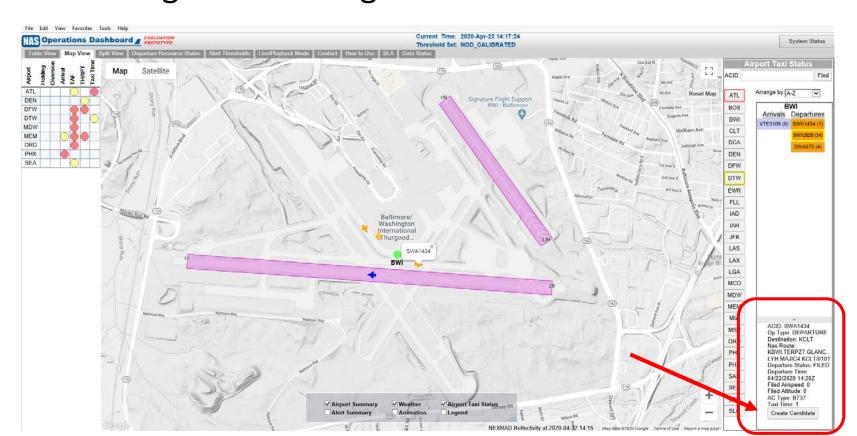
(See the next slide for an example of this display)

Entering a Pathfinder – option 2 example

Suppose the user has clicked on SWA 1434.

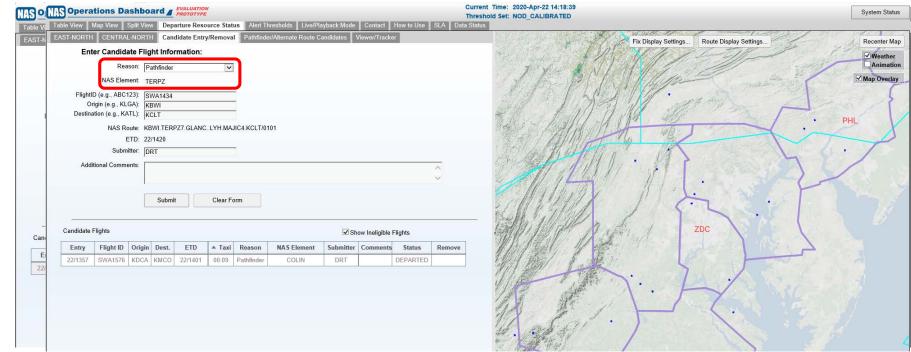
A box appears at the bottom right containing the Create Candidate

button.



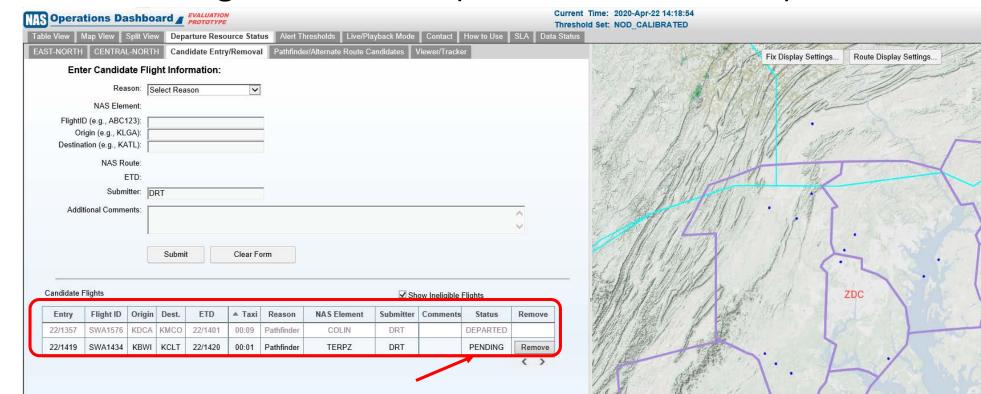
Entering a Pathfinder – option 2 example

- After clicking on Create Candidate the user is taken to the Candidate Entry/Removal tab where the data is mostly filled in.
- The user can now complete the Reason and NAS element then Submit this flight for consideration as a pathfinder.



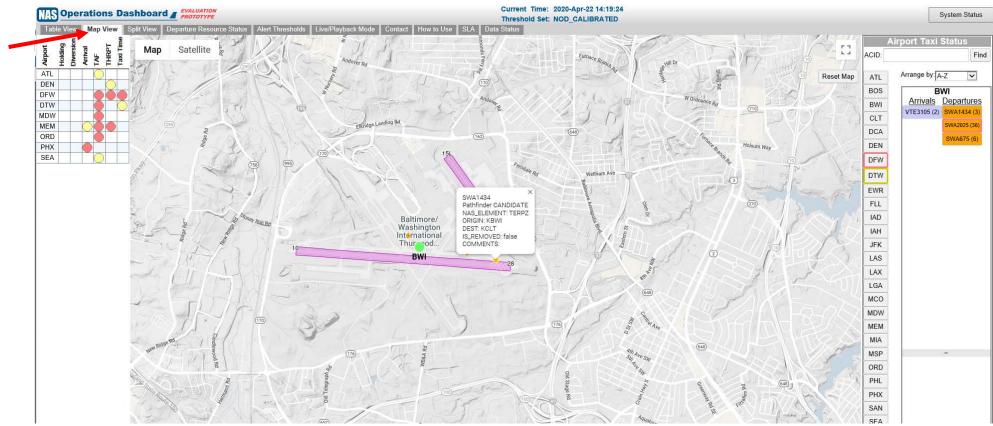
Entering a Pathfinder – option 2 example

- The confirmation box would appear like before.
- Then the flight would be added to the list of candidate pathfinder flights for the traffic manager to consider (indicted in red below).



Pathfinder/Alternate Route Candidates

• The facilities would be able to see the list of candidates able to take alternate routes and, if they had not departed, could view them on the surface by clicking on Map View.



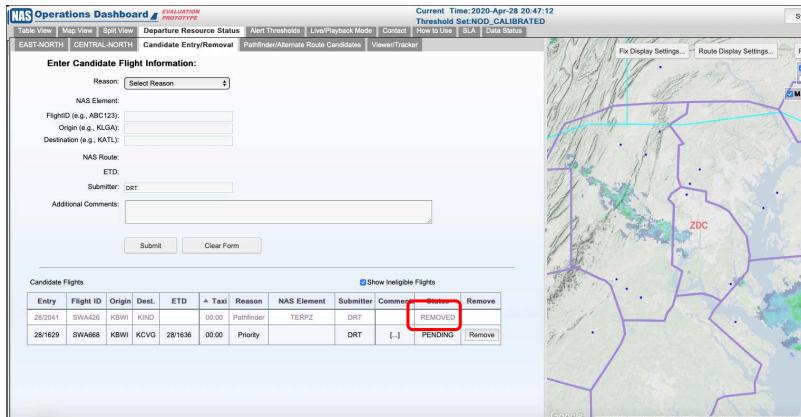
Candidate Entry/Removal

- Prior to the flight taking off, the operator can remove the flight from consideration by clicking on Remove in the candidate flight list.
- After clicking remove, a confirmation box will appear to confirm the removal.
- The Candidate Flight list will indicate that that flight has been removed. (See graphic on next slide)

The CDM community will adhere to ethical standards by only adding/removing their own operation's flights

Candidate Entry/Removal

- Let's remove SWA426 from the Candidate Flight list
 - We click on remove at the end of the line
 - The Confirm/Cancel box appears
 - Once confirmed the flight now indicates it has been removed.



Candidate Entry/Removal

- The other Reasons (Low Altitude Routes and Fix Balancing) are entered and removed in the same way as the pathfinder example.
 They just have different NAS elements.
- The only difference is how the Priority flights are entered and that is shown on the next few slides.

NAS Element - Priority Flights

- If the Priority Flights option is selected by clicking on the Departure Resource Status tab and by then accessing the Candidate Entry/Removal tab.
- The difference is that the operator will be required to fill in the Additional Comments section in the Candidate Entry/Removal tab.
- This can be used for PPE flights, crew legality issues, etc.

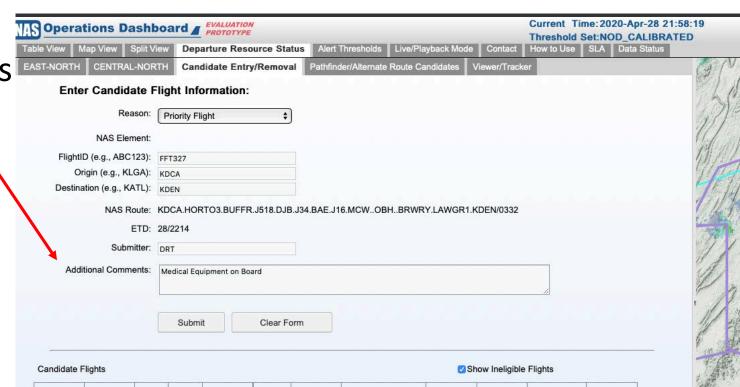
Inputs - Candidate Entry/Removal

 Here is an example of a Priority flight for Special medical equipment on board.

Notice there is no NAS element as we are just giving the facility

information of the priority in the Additional Comments section.

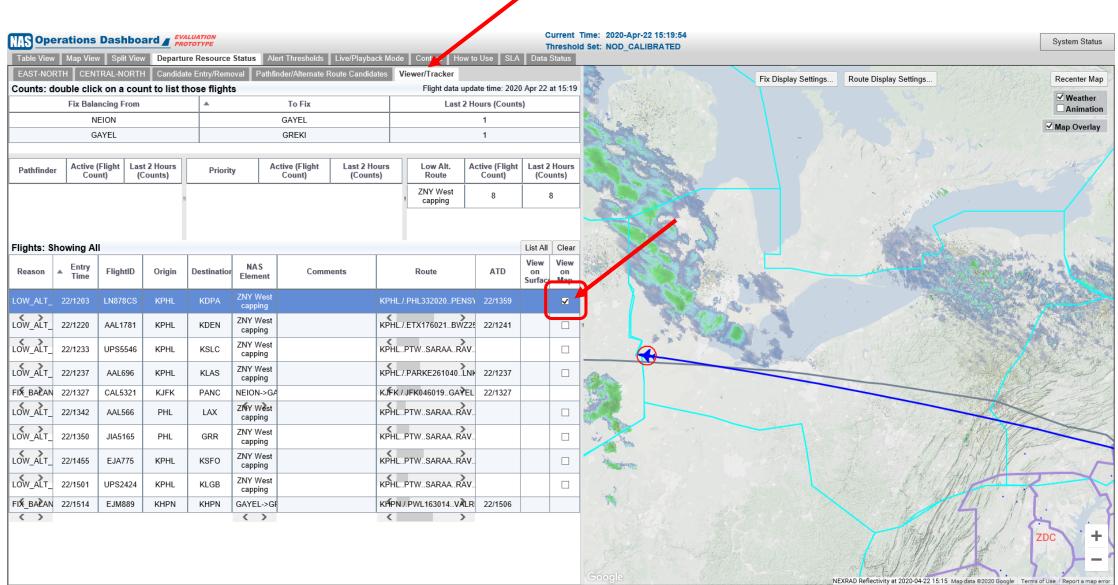
 Once submitted, it will populate as a Candidate flight.



View/Tracker tab

- The View Tracker tab (see next slide) allows the user to follow the flights as they are flying on their particular routes once airborne.
- By checking the View on Map box, you will see the flight path displayed on the map.
- The blue line will be the actual flight path and the grey line will be the filed route. (See next slide for a visual.)

View/Tracker tab



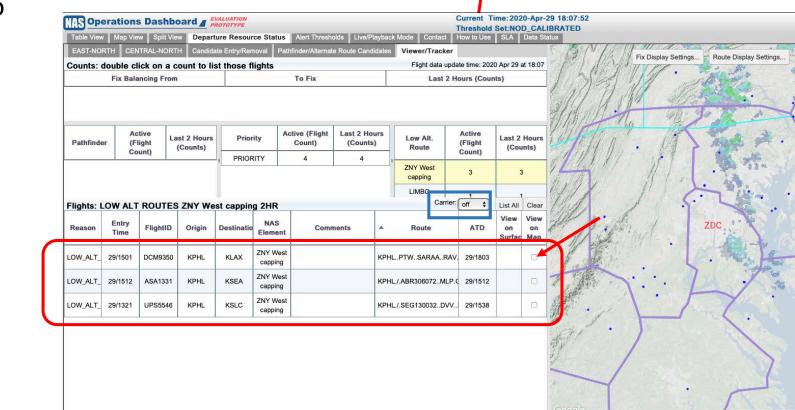
View/Tracker tab

 By double clicking on a number (For example the number 3 in Active (Flight Counts) in the Low Altitude Route box)

• The flights will populate the display which shows the flight data

 This also allows the user to view them on the map by checking the View on Map box.

 Carrier specific filtering is also accessed here (outlined in blue).



Pathfinder summary

 Again this tool is set to go live May of 2020 for just the Washington DC metro airports.

• The hope is there will be enough usage and data obtained throughout the summer to obtain feedback for improvements to this capability, make the process a permanent part of departure management in the NAS, and encourage the use by other facilities next year.