

**NextGen Flight Planning and Permits Layer
Implemented September 2020**

ARINCDirect is committed to continuous improvement of our services to the Business Aviation community. To that end, our Software Development and Systems Engineering teams' mission is to turn your requirements into reality. As part of that process, we routinely release new capabilities and functionality to the field. With each release, we distribute *Release Notes*, intended to provide a high-level overview of the improvements we feel are important to you, our Customer. As always, we encourage your feedback. If you have any questions or concerns, please contact us at 1-866-321-6060 (International: +1-410-266-2266) or email flightops@arinc.com.

With this release we will have completed the first phase of our transition to our new flight planning engine. We greatly appreciate all the feedback and questions you have provided on ways to further improve both the performance and overall quality of routes to this point and we will continue to make refinements based on your feedback. On Tuesday, September 15, 2020 we will be deprecating the **Legacy** routes from the **Create FPL** page within your ARINCDirect account and all route types will be computed by the new flight planning engine.

Most of the features and functionality that you have become accustomed to will be retained in this phase of introducing the new flight planning engine to the ARINCDirect platform. In addition, we will introduce a Permits Information Layer to the SkyVector Route Map. The release notes below will outline some of the differences you will see with the new engine and details regarding the new map layer.

Winds Aloft Forecasts

With the new flight planning engine we are introducing a 16 day winds aloft forecast for use in flight plan computations. This means much more accurate wind data are available for flight plans run well in advance of the departure date. Flight plans computed beyond 16 days in advance will be computed using the historical winds for the same date of the prior year.

NOTE: In comparison, the legacy flight planning engine used a 36-hour wind forecast and beyond that current winds were used for the computation.

Flight Level Entries

The new flight planning engine takes multiple data points into consideration when generating an optimal flight level for your flight plan. Any entry in the **FL** field is considered as the maximum flight level for the flight. If more favorable winds, altitude rules, or other restrictions prevent a route from being generated at the entered FL, the system will default to the most optimal flight level within 11,000 feet of the entered flight level.

NOTE: In North America the above only applies to the **Auto-Generated Route**. Recently/Frequently Filed/Cleared, Stored, and Custom Routes will compute at the entered flight level if allowed by the performance tables for the aircraft.

Cleared Routes (Beta)

As part of this release we are instituting a new route type for US Domestic flight plans. The new route type will be called **Cleared Routes** and be released initially in Beta. The new route type is being retrieved straight from the FAA SWIM feed and are routes that have been cleared by ATC. While we are very confident in these routes and the high probability of being cleared as filed, we are still in the process of performing some validation testing and therefore will be implementing a limited set of city pairs initially. We plan to expand the list of city pairs available along with adding more information about the clearances in future releases.

<input type="radio"/> ATC Cleared (beta)	(RW26R) WINCO2 WINCO DCT CHHRI DCT KPASA Q118 ATL DCT ROD DCT KLYNE Q29 JHW LVZ4 (RW01)	<input type="checkbox"/>
	ETE:3+18 Burn:9625 Cruise:M84 FL:450 Dist:1429 Max Shear:5	
<input type="radio"/> ATC Cleared (beta)	(RW08L) HITAG2 VALLY DCT PERMT AR16 ILM DCT FAK JAIKE3 (RW06)	<input type="checkbox"/>
	ETE:2+33 Burn:7453 Cruise:M84 FL:450 Dist:1012 Max Shear:4	
<input type="radio"/> ATC Cleared (beta)	(RW26R) HEDLY2 HEDLY DCT GRDON DCT BAGGY DCT FILLI DCT POB DCT BEEVR DCT SWANN DCT DQO V433 METRO DCT (RW01)	<input type="checkbox"/>
	ETE:2+22 Burn:6819 Cruise:M84 FL:490 Dist:1000 Max Shear:3	

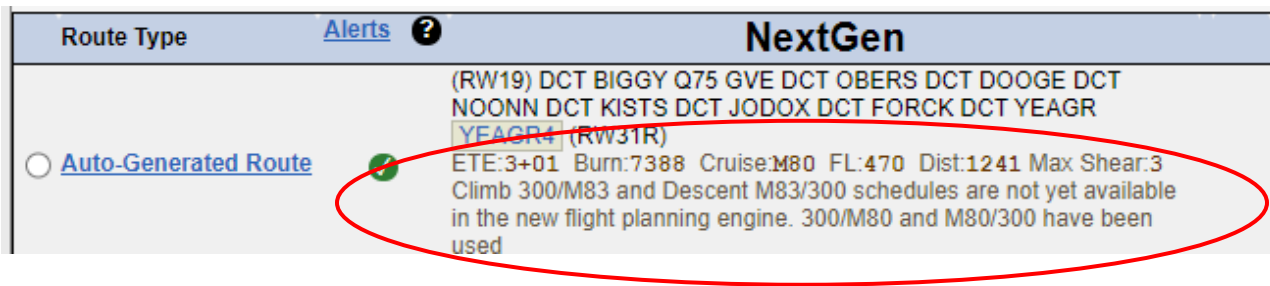
Account Maintenance

There are a few maintenance items that you should be aware of as we move to the new engine:

Climb, Cruise, and Descent Schedules

There are some climb, cruise, and descent schedules that will no longer be available with the new flight planning engine. We are in the process of removing schedules that we will no longer be supported post cutover. Flight plans will be computed with the next available schedule for affected aircraft types but we recommend reviewing the aircraft profile and updating your defaults if you are impacted. We understand that this may cause some minor inconveniences but due to the granular nature of the performance algorithms in the new system we have chosen to adhere to the published schedules in most cases. If we do have enough data points to build a new schedule through interpolation we may be able to do so. Please contact us with any requests post cutover.

NOTE: Affected aircraft types would have seen the message below when computing NextGen routes prior to this cutover.



ICAO Equipment Suffixes

The new flight planning engine incorporates equipment available on your aircraft into the flight planning process. It is important that the ICAO equipment suffixes are up-to-date and accurate for your aircraft. Please review the aircraft profile to verify and correct any errors.

Biases

It is important to review the biases on the aircraft that you operate. Differences in the way flight plans are computed and more refined performance data may require adjustments to the fuel biases that are currently stored on your aircraft profile. Should you need any assistance in making those adjustments please feel free to contact us.

Permits Information Layer

With this release we are adding value to the **SkyVector Route Map** by adding a layer that displays requirements for obtaining permits and important information related to filing flight plans into permit restricted locations. Data collected over many years have enabled us to provide a graphical depiction of locations requiring permits for both private and charter operations along with notes and helpful links to the associated CAA or AIP where applicable.



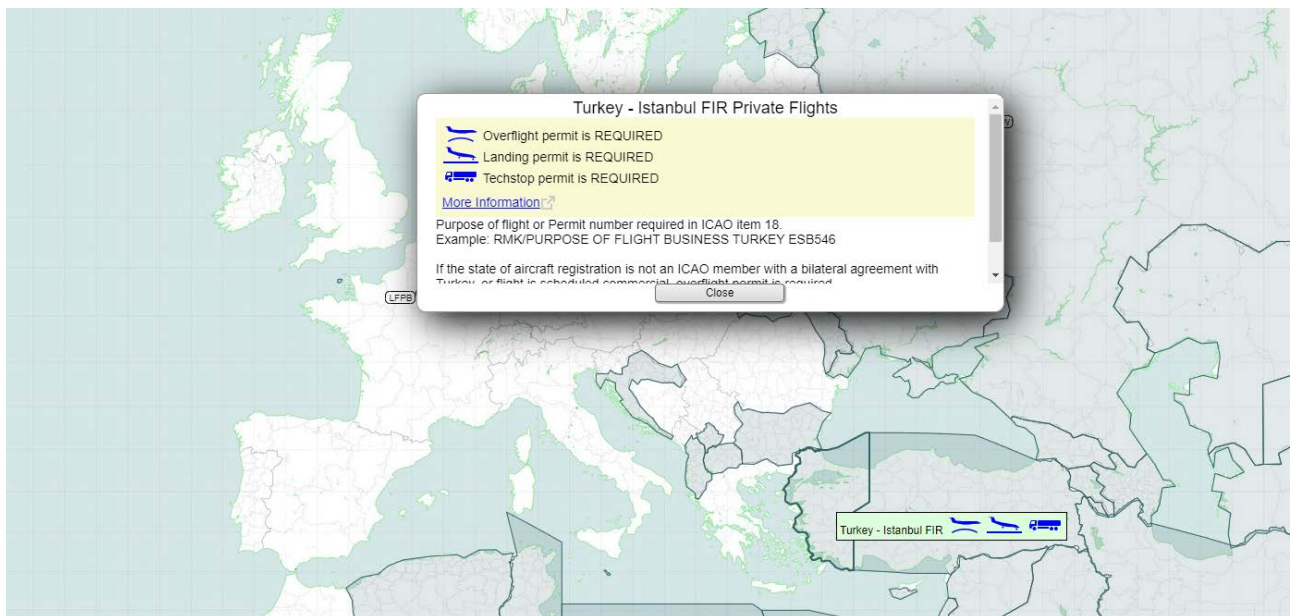
To enable the **Permit Information** layers open the layers tab on the **SkyVector Route Map** and navigate to the **SIGMETs / AIRMETs / TFRs** section. Checkboxes are available for both Private and Charter Permit

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Information. Selecting Private or Charter Permit Information checkboxes will automatically select the underlying Overflight, Landing, and Tech Stop options. Deselecting any that do not apply to your search criteria will streamline the display.



Once the layer is activated, hovering over a highlighted country will populate quick reference icons that represent the permit requirements for the underlying country. Clicking the country will display a pop-up with additional information.



It is our intention to implement the Permits Information layer on the iPad application in the near future.

Future Milestones

We feel it is important to share that this is the first of many milestones to come. A new user interface designed to work on mobile, tablet and desktop/laptop form factors is being worked in parallel to this effort. As more functionality is launched on the new platform we will bring unparalleled value to flight planning, scheduling, and connectivity services. Look for more to come from us in the near future!

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