



COMMERCIAL AVIATION SERVICES | AFM-DPI RETROFIT KITS

***Airplane Flight Manual –  
Digital Performance  
Information Retrofit Kits***

747-400, 767-200, 767-300 SERIES



# AFM-DPI Retrofit Kits

OPERATIONS BASED ON ACTUAL AIRPLANE CAPABILITIES

## GET THE MOST OF 747-400, 767-200, AND 767-300 ECONOMIC AND PERFORMANCE CAPABILITIES.

The Airplane Flight Manual - Digital Performance Information (AFM-DPI) system is a software package that makes the most of



“first-principles” methodology. First principles are defined as calculations that use fundamental airplane equations of motion (based on thrust, drag, lift, and weight).

It is through the use of first principles methodology, from individual point calculations, that improved

performance can be realized over existing paper charts.

As a result, AFM-DPI provides the potential to dispatch at higher takeoff weights or to use increased thrust reduction.

### Increase revenue payload.

At many performance-limited airports, given dry runway conditions, a typical 747-400 passenger airplane could add from 1,000 to 4,000 pounds in allowable takeoff weight through the use of AFM-DPI. Similar benefits are seen for the 767-200 and -300. For the 747-400 Freighter, for which

payload capability is all important, the above performance benefits may increase twofold or more! For a few representative 747-400 routes, this improvement in takeoff weight results in the revenue payload benefits shown below. Even greater benefits are realized when runway winds are factored in.



**Improve operational economies and extend engine life.**

When you are not performance limited, AFM-DPI enables you to save on engine maintenance costs and extend engine life by dispatching using increased thrust reduction. Depending on airport conditions, AFM-DPI will allow you to achieve approximately 2 to 3 percent greater fixed derate or a correspondingly higher assumed temperature for a given dispatch weight.

**Take advantage of today's technology for dispatch analysis.**

The AFM-DPI system provides comprehensive takeoff, en route, and landing performance analysis. Dry, wet, and contaminated runway performance is available. For wet runway performance, the dry runway cross-check is automatic. The AFM-DPI system provides both limited- and fixed-weight calculations, including an option to calculate the maximum assumed temperature for a given dispatch weight.

Other analysis options include final segment obstacle clearance and turn analysis with obstacle splay. All of this functionality eliminates the need for in-house wet, contaminated, and turning departure-analysis software. For operators who currently use the AFM-DPI system, the addition of the 747-400, 767-200, and 767-300 provides increased commonality with your dispatch operations.



**Full-range Boeing and Douglas airplane support.**

As part of The Boeing Company, Commercial Aviation Services has access to airplane design information and experience that allow us to offer the entire spectrum of after-sales support. This includes passenger-to-freighter conversions, engineering retrofit packages, avionics upgrades, interior reconfigurations, recovery and repair services, airplane performance improvements, and technical consulting for all Boeing airplanes.



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## **Commercial Aviation Services**

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