

## OXYGEN OFFSETS

The purpose of the Oxygen Offset is to provide planning and dispatching professionals with a quick and easy way to assess the financial landscape of planning flights at higher decompression altitudes. Ideal for operators executing high volumes of International/ETP operations, the Oxygen Offset Manager can help you reduce direct operating costs by using supplemental oxygen to flight plan at a higher altitude when complying with critical fuel regulations or dealing with restrictive ETP altitudes.

The Oxygen Offset Manager was the organic offshoot from the development of Ergo software and the O2 Timer. These software developments allow aircraft personnel to logically quantify oxygen reserves by flight planning at higher decompression altitudes. The result is tremendous fuel savings over time. The Oxygen Offset Manager was initially developed by ADS to assess the financial impact of higher altitude flight planning for its clients. Once developed, it became apparent that these software programs could significantly reduce the required fuel being uploaded, while remaining regulatory compliant. Most importantly, flights would operate well within the normal safety envelope.

## What Does the Oxygen Offset Manager do?

The Oxygen Offset Manager is a quick and easy way to calculate fuel savings for ETOP's operators and operators that use an Equal Time Point (ETP) analysis. The Oxygen Manager translates that fuel savings into financial savings based on the cost of fuel at the departure airport. The Oxygen Manager helps the flight department identify routes where fuel savings can be realized (and how much saved by varying aircraft altitude controlled by oxygen reserves). Once these routes are identified further cost refinement can then be analyzed by one of two ways:

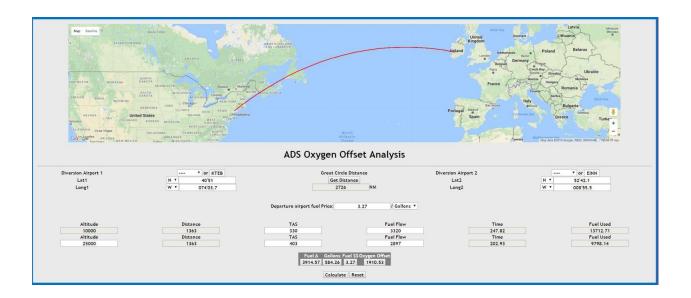
- 1) The user can **add a flight plan** and have the ADS oxygen offset software analyze the impending savings (aircraft-specific).
- 2) Enter or retrieve a past/expired flight plan and an analysis of that trip can be calculated.

While safety is always the primary consideration in flight, this innovation provides significant fuel savings that serve to reduce operating expenses and a flight's environmental impact/carbon footprint. Depending on the flight profile and the aircraft type, thousands of pounds of fuel can be saved on each flight by planning at higher, yet safe, decompression altitudes. The Oxygen Offset Manager is designed to assess the financial aspect of this option.

## A Valuable Tool for Planning and Dispatching Professionals

Whether you are an in-house dispatching department or a flight planning service provider, the Oxygen Offset Manager can be a useful addition to your operation. In contrast to other areas of aviation, dispatch and planning professionals are more frequently expected to weigh factors of financial efficiency as well as environmental impact of each flight. The Oxygen Offset Manager is a simple feature that can bring great operational flexibility to any planning operation.

The Oxygen Offset Manager is most effective for planned service routes with high frequency. Additionally, it is valuable for longer flight profiles where tankering can be reduced by thousands of pounds since that penalty increases each hour of flight time. Inversely, this weight savings may be significantly increased by higher revenue generating weight elements such as cargo or passengers if limited by operational weight constraints.



## **Functions and Features**

While the online Oxygen Offset Manager can provide a macro level analysis of which routes can yield a fuel savings, the Oxygen Offset Analysis software also calculates all aspects of this efficiency and tracks it on a per flight basis.

First, the software analyzes the most obvious savings -- the fuel saved by flight planning at the higher altitude. Then, it calculates the cost of not having to tanker the extra fuel/weight. It adds a value (if applicable) to efficiencies gained by flight planning at a higher altitude and converts this into a dollar savings for that flight. It also maintains a log of annual and all-time oxygen offsets savings.

Although carbon emissions and a flight's carbon footprint are being reduced, this additional benefit is currently not shown by the Oxygen Offset Manager. This capability has yet to be linked to a tangible efficiency the industry can track on a real time basis. With this future potential, users of the Oxygen Offset Manager will benefit from fuel savings, as well as additional savings through the use of carbon offsets.