HungaroControl
Hungarian Air Navigation Services

MERGE STRIP

MergeStrip stands for both HungaroControl's new traffic planning concept and the support tool as well. It helps air traffic controllers in the efficient sequencing of arrival traffic and facilitates the environmentally friendly conduct of continuous descent approaches.

Straight to the point

MERGESTRIP IS THE PRODUCT OF THE TMA EFFICIENCY PROJECT LAUNCHED BY HUNGAROCONTROL'S ATS OPERATIONS PLANNING EXPERTS.

PURPOSE

The primary goal of MergeStrip is to increase the fuel efficiency of aircraft operating in the TMA by simplifying labour-intensive ATC procedures and reducing ATCO workload. Another great outcome is that MergeStrip facilitates preplanning and early intervention in traffic sequencing conflicts, thus enabling the introduction of procedures that do not involve unplannable delay absorber downwind segments.

It helps pilots in planning their arrival routes from a long way from the destination airport (theoretically as far as **from the edge of radar coverage**). It also assists pilots in conducting **Continuous Descent Approaches** ideally **from the Top of Descent**.

Moreover, MergeStrip helps ATCOs plan easily with the **shortest possible route** and issue **shortcuts as soon as possible**. It eliminates the need for any special arrival procedures as well as the need for air routes, both inside and outside the TMA. In other words, it provides **free routing** from the edge of radar coverage.

FEATURES, BENEFITS AND SOLUTIONS

Without MergeStrip, the conduct of fuel efficient and environmentally friendly Continuous Descent Approaches require special arrival procedures and phraseology. Pilots are generally unaware of the exact flight path, as it is difficult for ATCOs to pass on correct Track Mile information and to judge whether an aircraft is on the glide path. The last phase of the sequencing with the aid of path stretching is done on the downwinds, which results in unpredictable and expensive level flight in low altitudes.

MergeStrip is an enhanced version of EUROCONTROL's PointMerge system.

It also eliminates the need for any special CDO related phraseology and it **reduces aircraft noise** in the vicinity of aerodromes. MergeStrip brings a brand **new way of representation of the current traffic situation**, both horizontally and vertically. Last but not least, **all you need is three way points**!

The concept and the software was developed by ATM system designer Richárd Madácsi, with the help of air traffic controllers.