MGL Avionics iEFIS

Guide to using Flap overspeed and ground proximity warning system
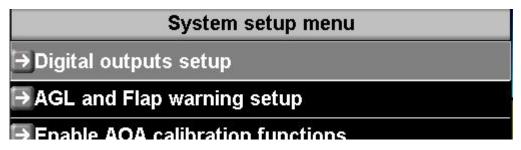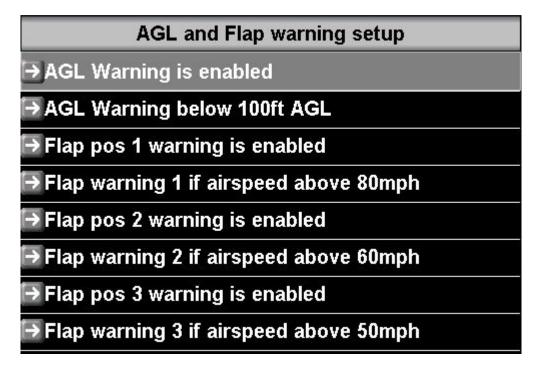
General

The iEFIS from contains ground proximity warning as well as position based flap overspeed warning.

This guide explains how to setup an use these systems.

Configuration

The ground proximity (AGL warning) as well as flap overspeed warnings are configured in the setup menu under:

System setup menu

→ Digital outputs setup

→ AGL and Flap warning setup

→ Enable AOA calibration functions

AGL and Flap warning setup

→ AGL Warning is enabled

→ AGL Warning below 100ft AGL

→ Flap pos 1 warning is enabled

→ Flap warning 1 if airspeed above 80mph

→ Flap pos 2 warning is enabled

→ Flap warning 2 if airspeed above 60mph

→ Flap pos 3 warning is enabled

→ Flap warning 3 if airspeed above 50mph

AGL Warning

AGL warning can be activated as verbal and on-screen warning message if altitude above ground level as determined from pressure altitude and terrain database is below a given setting. In the above example, 100ft. GPS position is required. This function will not work if there is no current GPS fix.

Once triggered, the warning mechanism is reset once altitude above ground exceeds the set

limit plus 50 ft.

The AGL warning may be disabled or enabled or enabled if Analog/digital input 1 on a connected IBOX or Extender module is either high or low. This allows the alarm to be suppressed if the gear is down for example by fitting a suitable gear switch.

The ground proximity warning is disabled after take off for a time set in the "terrain warning setup". This prevents unnecessary ground proximity warnings. Please also view your settings for automatic take-off detection in this regard. In case manual detection is used, the time starts from the selection of "starting an active flight".

Flap overspeed warning

Flap warnings result in a verbal warning "Flap speed – Flap speed" as well as an on-screen warning. Once triggered, the warning mechanism is reset once speed is below limits or if flaps are retracted.

One or two flap position points may be defined for overspeed warning. If two positions are defined, position 2 must be used for the lower airspeed threshold (typically full flaps).

For example, position 1 would be your first flap position at perhaps 80 mph and position 2 would be the second flap position at perhaps 60 mph.

Flap positions and measurement source are defined in the Flap control setup menu.

Using the internal flap overspeed with a VPX system

The internal flap overspeed monitoring mechanism works completely independent of a connected VPX system, if used.

Should you make use of the VPX functions for flap position and position monitoring, the internal system may still be used but it is completely independent so you should assure that your setup ensures that both systems work with similar settings.