

Case Study



Project

Personal aviation flight system (jetpack) communication panel

Application Characteristics



The jetpack is designed to automatically communicate changes in fuel load to the pilot during takeoff and flight. The advanced jetpack pilot warning display quickly and accurately provides all necessary information to the pilot including exhaust gas temperature, battery voltage, electronic control unit, and calibration.

The communication panel is illuminated, features color-coding to visually differentiate information, has a wide viewing angle, and offers clear contrast to ensure the dashboard is easy to read during flight so that the pilot can make fast decisions.

Light Pipe Provided

Light pipes (light guides) transmit light from a LED mounted on a PCB board to the user interface to communicate the vital information. The light pipes offer design flexibility, easy installation and multiple LED packaging options.

Light pipes are secured directly to the display panel with no mechanical attachment to the PCB. The installation and removal of the circuit board can thus be accomplished without disturbing the display panel.

Result & Benefits

The LPC rigid light pipe was selected due to its rugged material, easy assembly, superb daylight visibility and wide 160 degree viewing angle that delivers vital safety information to the pilot. It is simple (and necessary) to properly match the LPC light pipes with the corresponding color-code on the pilot warning display.



Additional design considerations included minimal light loss, light pipe pattern angle, the correct optical grade material and contrast (no glare).

Value-added Service

VCC's light pipes brings value when the operator is able to make better decisions or have better control of the systems due to the illuminated control panel.

VCC's daylight visible light pipes can be found in any industry or commercial application where human-to-machine interface is needed.

Are you ready for next level illuminated components?