Portable Glass Cockpit

PGC-A is an electronic pilot assistant that improves efficiency in normal flights and increases safety in heavy conditions. It supports wide range of missions, from flight training and general aircraft piloting to special missions, search & rescue and surveying. While PGC-A capabilities and functionality are equal or even better than of standard aircraft instruments, it can be also used as a back-up system on any type of aircraft or helicopter.

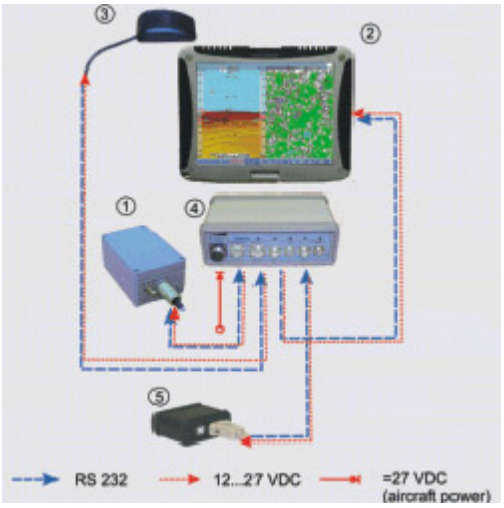
PGC-A: Portable Glass Cockpit

PGC-A is an electronic perspective predictive flight guidance system, which optionally uses synthetic terrain imagery in the background. It was designed as a hardware-software integrated system based on VITANS inertial navigation system complemented by proprietary “pictorial indication” software.

PGC-A affordably brings advanced piloting and navigation tools (EFIS, Flight Management/ Flight Director systems) even to the cockpits of light airplanes and helicopters. It is a portable system, based on modern computer and microelectronic technology, highly reliable and fast to deploy, that fits into a briefcase and offers a complete solution for navigation, instrument flight and even more. **For a detailed description please refer to the presentation below as well as download "Marketing Brochure" from our Support/Download section and various demo movies from the Showroom section.**

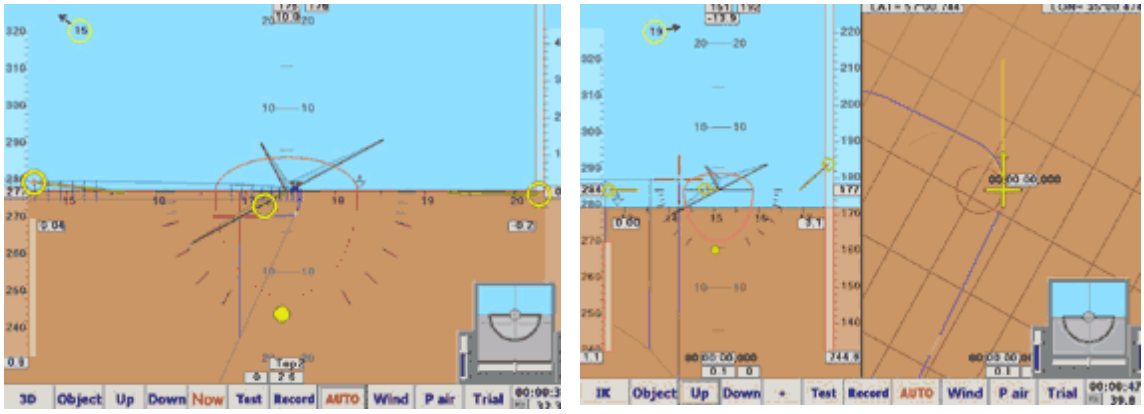
PGC-A Architecture

1. VITANS Inertial Integrated System
2. Panasonic CF-18 ruggedized tablet PC
3. Garmin GPS35 receiver
4. Optional commutation unit
5. Flight Data Recorder



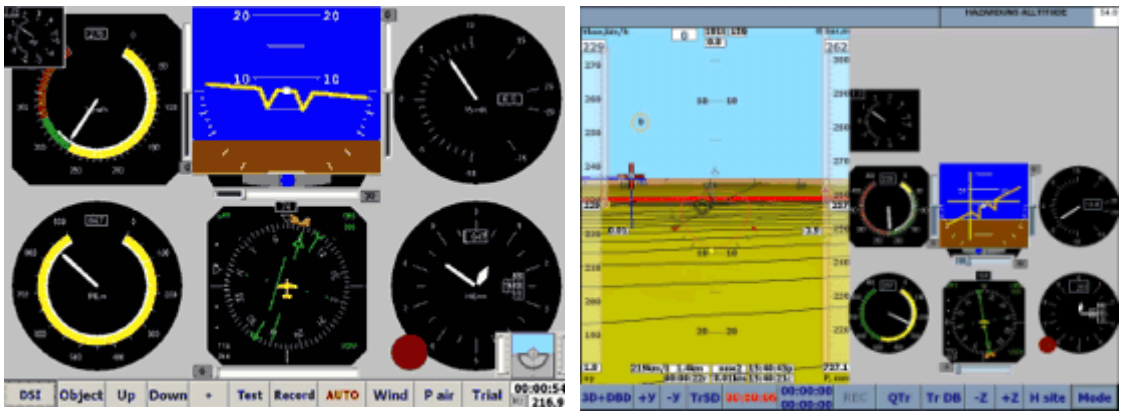
System Performance

Flight Guidance and Primary Flight Display



By interpreting flight dynamics PGC-A displays flight and navigation data as 3D and 2D graphics using clear images and shapes. In particular, the system can:

- Generate a visual image of a flight in real time and enhances spatial ability of a pilot (especially in heavy flight conditions)
- Provide warnings about possible exceeding of operational limits and ensures terrain collision awareness with the right timing
- Supply a pilot with accurate prompts about aircraft steering in order to maintain the required flight parameters

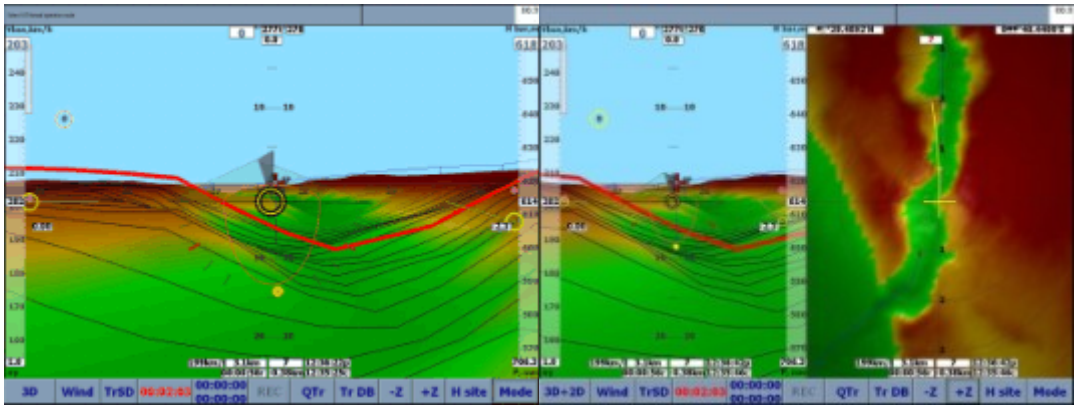


In PFD mode the system generates indication of flight data generated by inertial system in the same format and can be used in the same manner as a conventional instrument panel:

- Attitude indicator
- Airspeed and ground speed
- Altitude
- Vertical speed
- True heading, magnetic heading
- HSI

- G-meter
- Turn rate
- Slip ball

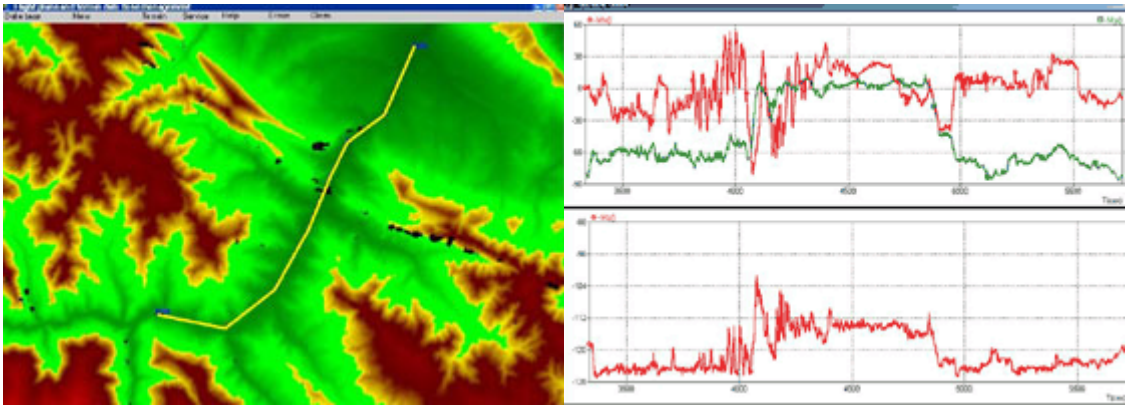
Moving Map and Digital Terrain



The combined INS and GPS navigation data is displayed on the moving map, providing

- Easy navigation on the moving map and accurate aircraft guidance along the designed trajectory;
- Automatic landing approach programming
- Capability for a low altitude flight, following of the terrain with hills, and for obstacle avoidance using digital pictures of terrain

Flight Planning and Flight Analysis



Flight Planning

PGC-A provides capability for extensive flight planning using known aeronautical databases and digital maps. It supports geo-referenced charts in publicly accessible format. Using PGC-A a pilot can create an approach pattern for any landing point taking into consideration local terrain and wind conditions. A virtual flight mode is available for pre-flight training purposes.

Flight Analysis

The flight data stored by Flight Data Recorder (optional unit connected to PGC-A) can be played back to allow flight analysis and identification of the errors made. 3D flight visualization is available with optional software.

Deployment

Two systems in Mi-8 heavy helicopter

Light airplane

Robinson R-44 light helicopter

Ultra-light seaplane