TELEDYNE CONTROLS
Everywhereyoulook™

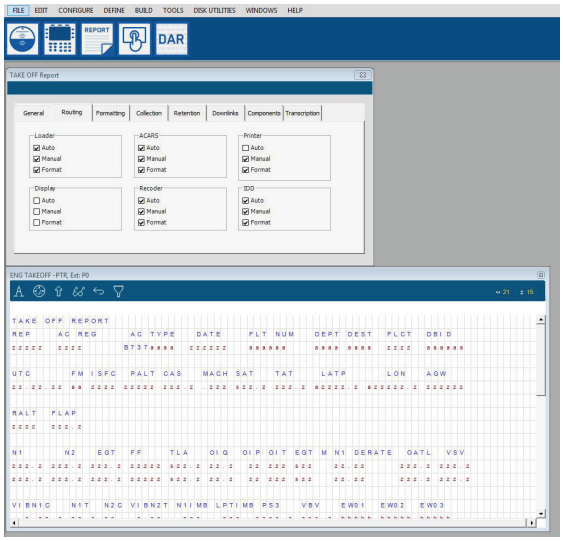
APPLICATION GENERATION SOFTWARE (AGS™)

Maximize your Aircraft Condition Monitoring Capability with Teledyne Controls' Application Generation Software (AGS™)

Teledyne Controls' Application Generation Software (AGS™) is a PC-based solution for data acquisition and management that allows aircraft operators to create customized ACMS/ADAS/AIMS applications. With AGS™, operators can specify what aircraft parameters to acquire, monitor and/or record; they can design their own display screens (MCDU/MICDU/IDU/MIDU), customize the content and format of their reports, and establish the conditions under which such reports are generated. All is accomplished through AGS™'s user-friendly, Windows-based interface.

The AGS™ applications can be uploaded, and therefore allow operators to maintain and modify their data management systems without having to remove the equipment from the aircraft – delivering significant time and cost savings.

AGS™ can be used to program Teledyne's data acquisition and management units, such as the DMU, iDMU, DFDAU/DFDMU, FDIMU and MFDAU.



Traditional Uses of ACMS

- Engine trend monitoring (take-off, cruise, ect.)
- Engine extremity monitoring (over speed, over temperature, vibrations, ect.)
- Airframe structural limitations monitoring (hard landing, ect.)
- Fuel monitoring
- Flight operations monitoring (FDM and FOQA)

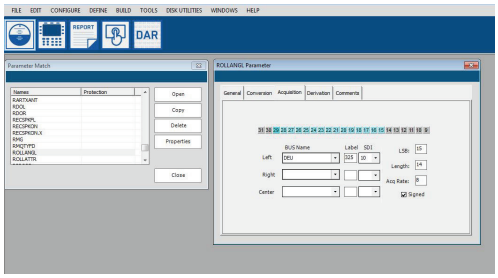
Benefits of ACMS

- Improved aircraft operation
- Improved dispatch reliability of the aircraft
- Enhanced engine and aircraft systems maintenance, and early detection of failure helps reduce costs
- Ability to program uploaded applications and eliminate costly software modifications
- Capture of structural load parameters
- Production aircraft data gathering to aid in isolating and fixing persistent aircraft problems

User Programmability

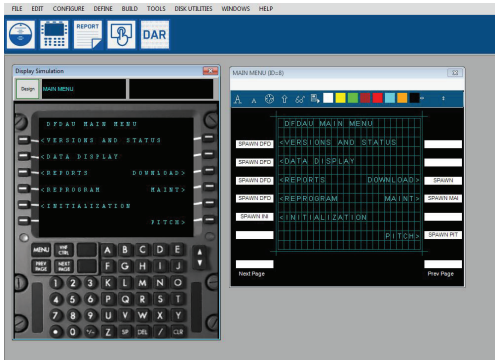
AGS™ Provides Five Primary Areas of Programmability:

- **Parameters:** Both acquired and internal parameters can be specified. Through pre-designed menu lists, the user can easily select the parameters, the desired bus, and the specific bits to be acquired.



Parameter Definition

- **Displays:** AGS™ enables operators to create their own display screens (e.g. MCDU). Using the Display View mode, it's easy to type and position the text, choose the size and color of the fonts, and insert the desired key actions from a drop down menu. Once the design has been completed, the Simulation View mode is utilized to visualize the screens and navigate the menu structure.

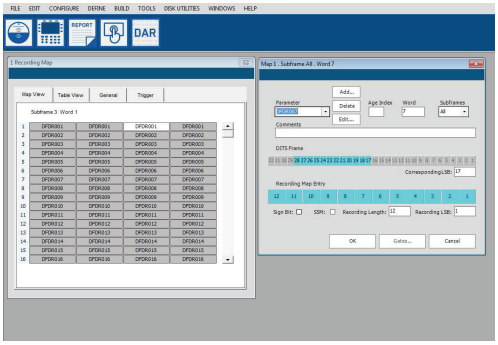


MCDU Screen Definition

- **Reports:** Users can create their own custom reports. The parameters can be quickly selected from a drop down menu, while the report layout can be arranged through a user-friendly graphical interface. Additionally, the AGS™ system allows reports to be manually or automatically routed to various destination devices, such as ACARS, printers, recorders and loaders.

- **Triggers:** To write their own triggers, users have the option to rely on the traditional AMTAL trigger logic, or employ Teledyne's pre-designed commands and objects included in the AGS™ trigger wizard. For example, triggers may be used to perform calculations, launch recordings or activate reports.

- **Recording:** Thanks to a graphic representation of the data frame, which is displayed by word and sub-frame coordinates, the configuration of the recording map is very easy. Allocation of acquired parameters to recording words can be made in a snap.



Recording Map Definition

Additional AGS™ Features

- **Online Help:** Provided for every function, the online help is indexed and offers a search function. The AMTAL (Aircraft Monitoring Trigger and Action Language) manual is available online, as well as all application notes.
- **Multiple Simultaneous Windows:** The user can view several windows at any time, including multiple windows of the same type (for example, a report and two parameters).
- **Transparent Networking:** An operator can access an ACMS database from another PC over the network.