



# At TAG Aviation, PDAs take off with WinDev Mobile

GSInformatique has implemented a mobile solution for communicating between the pilots of TAG Aviation. WINDEV Mobile and WEBDEV are on the same frequency.



## The company

TAG Aviation is the world leader in business air travel. The company has a fleet of 200 aircrafts and relies on a team of 700 pilots.

## Project Leader



**Moïse Gerson** (on the left) is the IT Manager within TAG Aviation.

**GSInformatique** is a distributor of PC SOFT in Switzerland as well as a service provider.

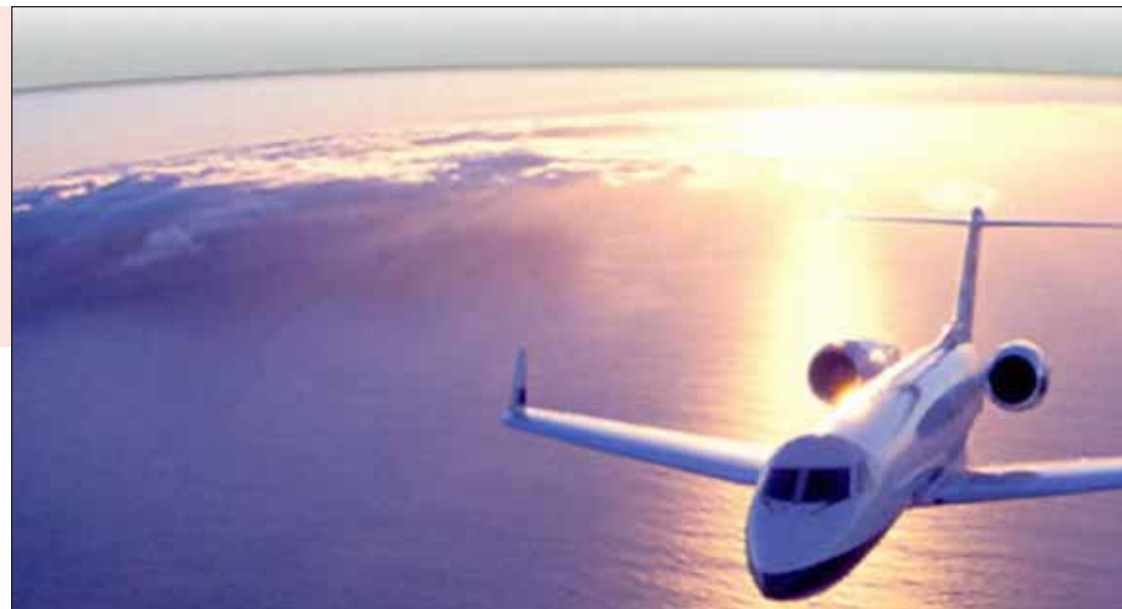
**Samir Bouchetibat** is the project manager in GSInformatique.

## Log Sheets tighten the budget

Amongst the many procedures that are relevant to a pilots' job, managing "log sheets" can sometimes be constraining.

These log sheets are official documents that follow an international air standard and that are very often filled out manually by pilots after landing.

They contain several types of infor-



mation such as schedules, which are crucial for security, flight optimization and planning.

Up to now, these log sheets were transferred to the control center as soon as the pilot could have access to a fax or some other means of manual transfer. This translated into a variable delay in taking the data into account.

Once received, the entire log sheets were entered into the central information system, which created an opportunity for introducing errors. "We conducted a market research and asked GSInformatique to automate the entry of the technical log sheets. Regarding the development architecture, it was mainly settled by restrictions in the calendar and in the budget: in other words, it had to be simple, quick and had to work!" declared Moïse Gerson.

## WINDEV Mobile mission on the pilots' PDAs

The objective of TAG Aviation was to give the pilots PDAs to fulfill their flight-related needs. The goal was for them to be able to obtain from their PDA the list of all the flights for a given day and for each flight retrieve the planned data, enter the real data through a digital form, and send this data to the control center.

"Considering the time restriction and GSInformatique's expertise with PC SOFT's development tools WINDEV was the logical choice", confided Moïse Gerson.

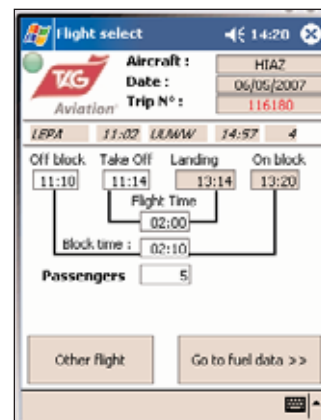
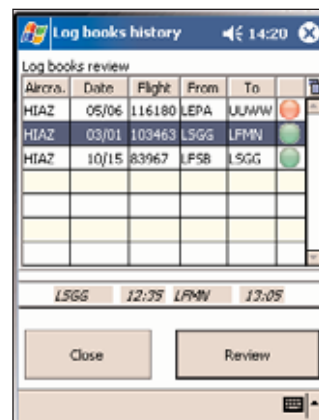
"When I saw the speed at which WINDEV Mobile lets you create windows, I felt at ease about the objectives that had been set", he added.

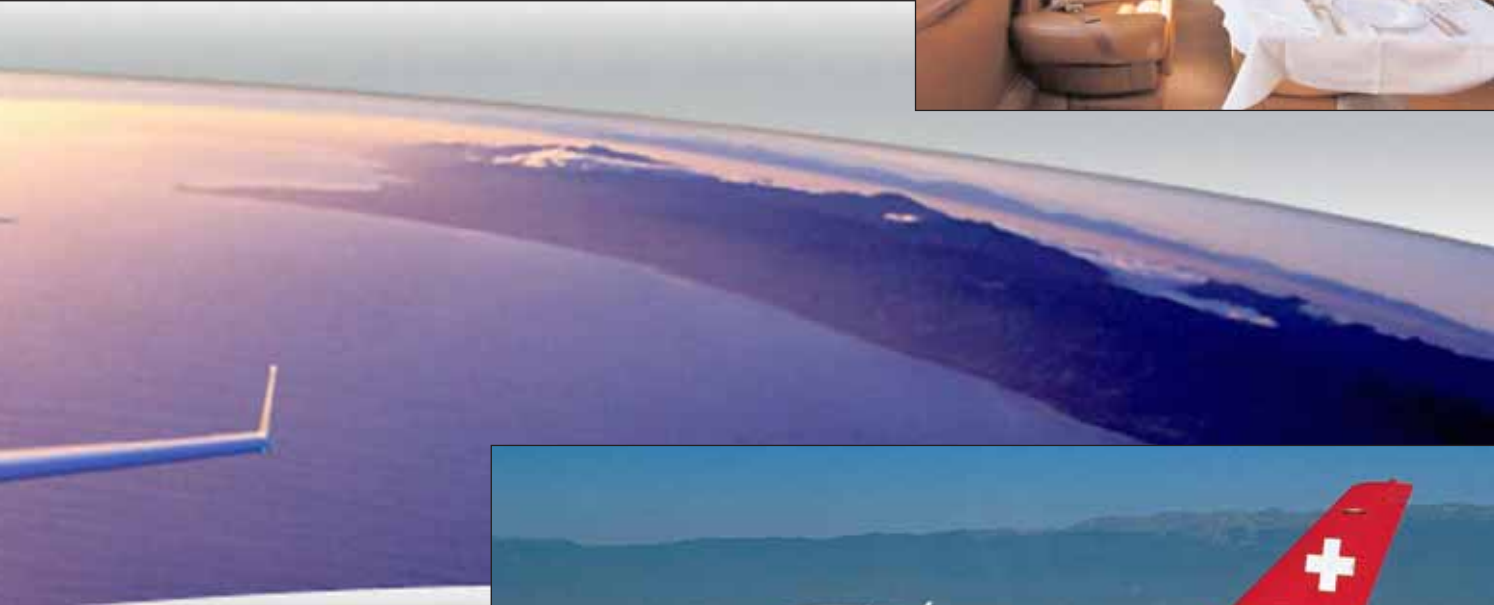
At any given moment, the pilot can connect to the central system via his PDA just by typing in his login. Almost immediately, he receives the information regarding the scheduled flights for his airplane.

Right after landing, the pilot fills out the virtual form on the PDA (Flight number, boarding time, take-off, landing, fuel used, number of passengers,...). He then sends this form using either WiFi or GPRS depending on where he is.

"The application is designed to detect all by itself the availability of a wireless network and to automatically switch to GPRS mode in its absence. The data is directly inserted into a "buffer area" in the information system, which can be visually controlled by an operator, who is in charge of validating", detailed Samir Bouchetibat.

## Loud and Clear in WiFi or GPRS





**WEBDEV, communication control tower**

On a technical level, some explanations are needed: *“the PDAs retrieve and display the information that is stored in proprietary databases (airspace back office). More precisely, the queries are sent to an AWP page created with WEBDEV. The page communicates with the database using ODBC and then limits and encrypts the results before sending them to the PDA”*, detailed the project manager.

Having a constant need for reliability, we emphasized the simplicity of the communication method: the set of transfers is based on an Apache Web Server and on the WebDev application server.



**To the end of the world, there'll always be an Extranet with WEBDEV!**

It's obvious that the process that was implemented made the procedures and decision making process more dynamic. For example, as soon as an airplane lands, the central system is immediately informed of its availability and can therefore anticipate connecting flight delays, and manage reassignments.

The fact that the double entry was eliminated also improves reliability. In spite of all its qualities, the problem that was left to be solved was the non-permanent availability of wireless connections. Moise Gerson presented the technical solution: *“We've decided to deploy a secured Extranet site so that the pilot can access the form from any Internet access point”*.

The project manager at GSInformatique tells us about his

experience: *“There's no other program like WEBDEV for creating dynamic Web pages. Furthermore, the ability to use the same language to develop the Web site and the mobile application is unique and cool! To my knowledge, these are by far the best development platforms on the market. Since I spend my time creating applications, I might as well enjoy it, right?”*

**Is there a WINDEV Mobile inside the airplane?**

The application was received with enthusiasm by all the users (pilots and administrative personnel). *“The gain in productivity is undeniable”*, recognizes Moise Gerson.

The success in the deployment of this version of the application has given us

ideas. It is now in our plans to enrich the application with the crew information and with information on the approach taken for landing. The objective that was set by TAG Aviation was to equip the whole fleet, nearly 200 airplanes.

