

# In English, please



## AERIAL ARCHEOLOGY PLAYING INDIANA JONES IN THE AIR

BY DOMINIQUE DÉFOSSÉZ

Air traffic controller, author of *L'anglais pour voler* • [www.anglais-pour-voler.com](http://www.anglais-pour-voler.com)

One day last summer, Eliot found himself unexpectedly idle. Being only a short drive away from the aero club, he decided to check if an aircraft was available for a sightseeing flight along the coast. Hard luck! There was no vacant slot at the club for the next couple of hours! As he was leaving, disappointed, racking his brain to find out what else he could do on this fine afternoon, Philippe, one of the club long-term members walked in and, noticing his frustration, offered him to tag along for his planned expedition: a few hours of archeological spotting. Eliot, always eager to live new aeronautical experiences, accepted with enthusiasm. It was, definitely, a new aeronautical experience! First, the aircraft, a photographer's all time favorite high-wing Cessna, had to be prepped. After the traditional stop at the pump for refueling, the passenger door was removed and a strap fixed across the door frame. Then Philippe handed Eliot a sweater, and insisted on showing him where the vomit bags were kept. Vomit bags? What for? Eliot could not remember having been sick during a flight! By the time the aircraft was ready, Philippe's sidekick, Maurice, had arrived.

### Airborne archeologists

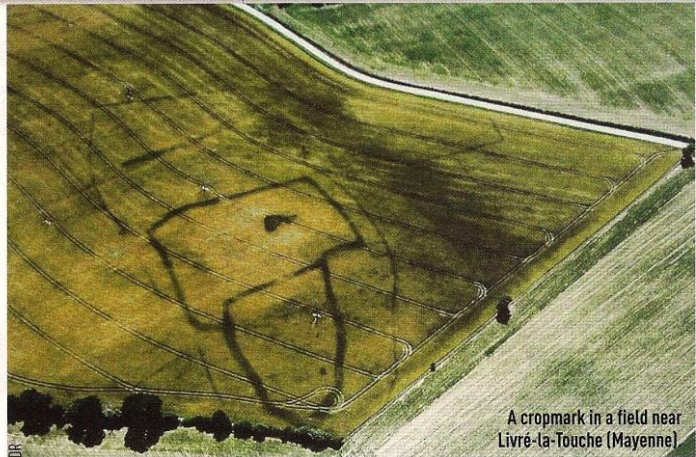
Once the introductions were made, everybody settled in the aircraft: Eliot at the back, Philippe in the pilot's seat and Maurice tightly fastened in the seat next to the missing door, his two cameras secured around his neck. The first 50 miles or so were rather uneventful, though Eliot realized soon enough that the sweater was no luxury: even in the heart of summer and at only 1,500 ft, the draft sweeping the back of the aircraft was rather cool. Eliot followed the flight path on a map, enjoying an ordinary nice-weather flight over Brittany, with its profusion of green fields, small villages,

silvery lakes and towering wind turbines.

And then it started. Each time Maurice saw something he thought could be of interest, he extended his arm in front of him to draw Philippe's attention, then if what he had spotted was worth a picture, he tilted his arm and Philippe immediately rolled into a steep turn. If Maurice was not happy with the picture he had taken, he asked for another 3-60, sometimes the other way around. The weather was a bit bumpy that day, so Philippe could not perform 60° banked turns. But even so, the maneuvers were quite impressive, and their repetition in quick succession rapidly made Eliot feel uneasy. Philippe and his partner had decided beforehand to make a stopover at Guiscriff, for biscuits and a drink. As his stomach was slowly settling down, Eliot took advantage of the quiet break to ask questions about this peculiar activity.

### Archeological air survey

Aerial photography was developed for intelligence purposes during WWI. It was adapted to archeology soon afterwards. There are several ways to make use of aviation in archeology. To start with, a bird's eye view sometimes allows to discover a site in its entirety and helps understand known locations. Then, in winter or in summer late in the afternoon, the low sun casting long shadows on the landscape can highlight subtle height variations in the ground, revealing ancient earthworks: earth banks or low walls standing just below the surface. As for cropmarks, they show up on cultivated land. Buried ditches are filled with nutrients



A cropmark in a field near Livré-la-Touche (Mayenne)

and retain more water, therefore the crops above them grow better and taller than in the surrounding soil. On the contrary, a buried stone wall will retain less water, be an obstruction to root development and will stunt the plant growth. Cropmarks are better distinguished if there was drought at the beginning of the growth period, causing the crop to suffer from moisture stress and giving the stronger plants above the ditches a different color, either of a darker green in a green field, or green in a ripe yellow field.

Both Philippe and Maurice studied archeology and have been working at revealing Brittany's archeological hidden remains for more than 25 years. Their only salary to do the job is the thrill of discovering new sites, although they receive grants from the Ministry of Culture and some local governments to pay for the aircraft flying hours and the photographic equipment and supplies.

Once the pictures are taken, they are catalogued and filed in a databank and the sites are noted down on an archeological map. The work is used by scholars to study and interpret land use and occupancy over the years. It is also referred to each time a construction project, either private or public, is planned.

Next time you see an aircraft erratically flying circles over a field, with apparently no aim whatsoever, don't be alarmed. It might be Philippe and Maurice mapping our past for future reference. ●

### Vocabulary

TO BANK	.....incliner
▲ DITCH	.....un fossé
▲ DRAFT (US), A DRAUGHT (GB)	.....un courant d'air
▲ DROUGHT	.....sécheresse
▲ GRANT	.....une subvention
▲ SIDEKICK	.....un compère
▲ SLOT	.....un créneau
▲ STEEP TURN	.....un virage serré
▲ STUNT GROWTH	.....freiner la croissance
▲ TILT	.....incliner