

Birdy Fly



As we were saying, “if they could imagine it, they probably shot it.” Meet Frédéric Jacquemin, Manager of Birdy Fly, (at left) showing us the guts of Birdy Fly at the Micro Salon.

Birdy Fly on “Oceans” was an electric radio-controlled helicopter with a Super 35mm carbon-fiber modified lightweight Arri 2C.

Birdy Fly is helpful for close-range aerial filming. The miniature helicopter can fly up to a speed around 50 mph. Exciting shots can be made using wide lenses flying at low altitudes (from almost ground-level to 300 feet).

The radio-controlled helicopter is flown visually by the pilot, up to a distance of about 600 feet. Longer distances are possible if the pilot follows in a chase boat. The helicopter is equipped with a remote head, which a camera operator controls for pan, tilt, and roll.

The helicopter has an electric engine, which has proven to be more reliable than previously used methanol fuel. Electric helicopters have a better reliability, start up immediately, and are not affected by atmospheric conditions like altitude, temperature, and humidity. The absence or lack of engine vibrations brings a steady work with a great picture smoothness. Absence of exhaust smoke and a low noise level also help. The batteries allow more than 10 minutes of flight time with the 35mm camera with 200 foot magazine (2 minutes, 13 seconds at 24 fps).

The clever use of carbon fiber to replace the original aluminum castings lightens the load to a mere 7.09 pounds with film, lithium battery, camera, receiver, iris motor, color video assist, wireless transmitter, and 20mm lens with filter.

The total weight of the mini chopper with 35mm camera package is 23 pounds. The rotor diameter is 5.9’.

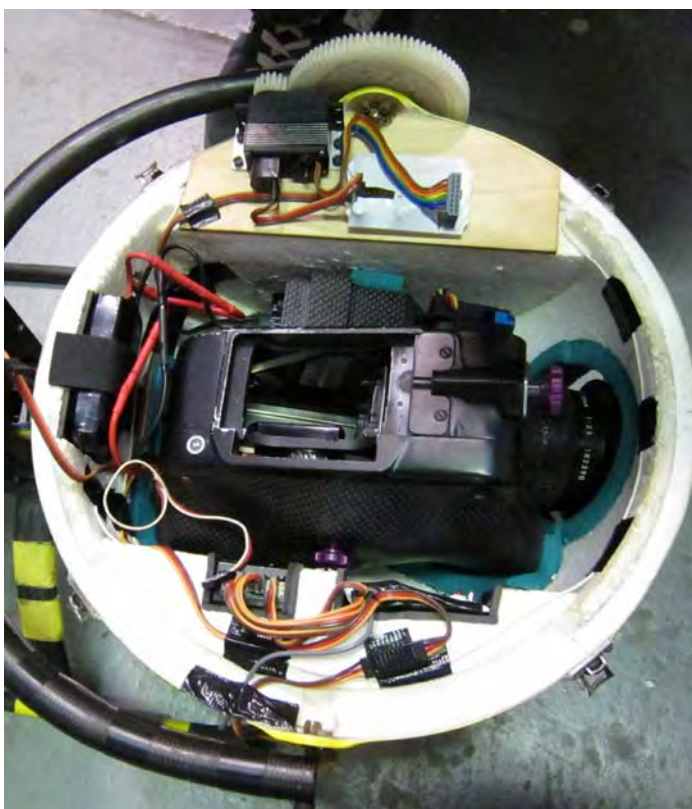
Credits for the Birdy Fly unit on “Oceans:”

Jacques Cluzaud : Director

Frédéric Jacquemin: Birdy Fly Manager

Christophe Pottier: Director of Photography

Melinda Lignot: Camera Assistant



Birdy Fly Amphibious Mini Heli Pad



Frédéric Jacquemin writes, “In early 2005, Jacques Perrin’s film production company, Galatée Films, contacted Birdy Fly, planning to use the remote-controlled helicopter in order to obtain unusual shots of wildlife footage and, in addition, to get aerial shots in areas restricted to real helicopters.

“After flying tests in real conditions, the equipment was modified to fit the director’s needs and requests. Zeiss Standard T2.1 lenses (16, 20, 24 mm) were purchased according to the wishes of DP Luc Drion, to get as close as possible to the look of other lenses used on this film. Some upgrades were made on video assist. A ground glass was fitted with with 1:2.40 frame lines in Super 35 centered format. Framing and steadiness were tested.

“Jacques Perrin doesn’t appreciate the off-level framing, which often occurs with a mini-chopper. To maintain a level horizon, an electronic inertial unit was integrated, courtesy of Thomas Kleszczowski, to stabilize the camera head (tilt and roll axis). The head’s motors were changed for better precision, smoother movement and better response to the operator’s moves.

“DP Christophe Pottier was appointed operator of the Birdy Fly camera head and practiced during many long training sessions to learn the particular ideosyncracies of the machine and to become confident with the pan axis and tail rotor coordination in conjunction with the pilot.

“Shooting continued through July 2008, including two sessions in South Africa for the “Sardine run” (dolphins and Cape Gannets), two in Norway (orcas), Mexico (blue whales), Guadeloupe (spermwhales), New Zealand (orcas), Alaska (humpback whales). The special conditions of wildlife shooting are hard on crew and equipment, especially when shooting 62 rolls of film in 10 days in Mexico.

“We had one accident during the shooting: the loss at sea of one camera after crashing into a Cape Gannet in May 2007, nearby Port Elizabeth.”

<http://birdyfly.com>

Birdy Fly Photos: Christophe Pottier





