



## Claes Axstål Air-borne flash art

With the Canon EOS system and superlative, highly specialised flash equipment, Claes Axstål »shoots« literally heavenly pictures: Perfectly illuminated aircraft and yachts— even with back lighting.

The two-seater jet fighter looks like an over-dimensioned bird of prey – the fuselage is as black as the night sky around it, the leading edges of the aerofoil and control surfaces flash white, the winglets, elevator and yaw rudder glow red like molten glass. The pilot and co-pilot can be clearly seen in the cockpit. Motion-blurred rain drops escort the Albatross L-39 jet fighter like a swarm of glassy arrows, contrasting strongly with the sharp focus and high contrast to lend the image a truly unbelievable dynamism, with the last sunrays of the dying day bursting like lava from between the clouds: The aircraft photograph would persuade young boys to give up their entire Starfighter collection in exchange for it – without batting an eyelid. But it is also a picture that even the trained eye finds impossible to believe. Photoshop artists must have been at work here – there's no way you can take a photograph like that!

And yet you can – or at least, Claes Axstål can. The Swedish aircraft photographer works with what must be the »baddest« flash gun between heaven and earth: With thousands of watt-seconds of power and a range of up to 200 metres.

It is unique in the world, and it is approved for operation onboard aircraft. Airborne Flash Photography, abbreviated to AFP, is Axstål's name for his 250 kg »monster« flash system which consists of multiple generator units and two flash heads the size of medicine balls. In co-operation with the Swedish manufacturer Profoto, he develo-

ped this equipment with enough shielding to protect sensitive aircraft electronics from the massive electromagnetic pulse released by the instantaneous discharge of thousands of watt-seconds. But there you go: Extreme photographic challenges require extreme photographic measures ...

### Air-worthy flash: Full shielding

Airborne Flash Photography was also used to photograph the Albatross described in the introduction. Axstål was commissioned for the shoot by the aircraft charterer »Million Air« in Houston – in combination with a Canon EOS-1Ds Mark II. »No planes were available, so we hired a Bell Huey helicopter. We were at an altitude of over 1000 metres, as always the door was wide open, it was raining cat and dogs, and it was cold,« says Axstål thinking back. »On top of all that, everything was vibrating like crazy because the helicopter had to fly at maximum speed just to keep pace with the jet.«

Axstål took the spectacular Albatross photo using the image-stabilised Canon EF 70–200mm 1:2,8L IS USM US zoom lens; the distance to the target object was no less than 50 meters. Axstål's high-performance system brings a whole new meaning to the term »fill-in flash«.



The Canon EOS-1Ds Mark II captures the flash ...



... emitted by Axstål's powerful flash guns.

The power of this mobile flash system easily fills-in large backlit objects up to 60 meters away – and that with an aperture of 8, ISO 100 and an exposure time of 1/500 sec. If Claes Axstål – »CAX« for short – turns up the sensitivity, the maximum range of the battery-driven twin flash units even reaches up to 200 meters.

### Flash photography in flight: The challenge

Just what the actual power output of the AFP flash system is, is something that CAX keeps to himself. »Trade secret,« he says, laughing, »but I will say this much: To gain just one more f-stop, I had to invest another 100.000 Euros.« You get a feel for the power discharged by this customised system from the picture of the helicopter on page 38. Axstål's assistant captured that image during a Carib-

bean yacht-shoot with a Canon EOS 20D. He used a Pocket Wizard wireless flash trigger to simultaneously set off CAX's airborne flash system. It is no surprise to hear that some unsuspecting passers-by were irritated by flashes from a clear sky. The following day, local newspapers had to inform their readers that it was nothing to do with a UFO.

Although Axstål's flash technology has the flexibility to handle pretty well any job, the technical and logistical demands present a new challenge every time: As CAX and his Canon EOS 5D were aboard a ship photographing a historical bi-plane directly against the setting sun (see page 40, top picture), both pilot and photographer had to go to their limits. »That picture was a challenge from the photographic and aeronautical point of view. The evening sun was still quite





**INTERVIEW**

»Everything has to work perfectly.«

**Claes, what is the greatest challenge in your type of photography?**

Hiring aeroplanes or helicopters is extremely expensive, so everything has to run like clockwork. In southern regions in particular, where the sunset lasts only for minutes, the time windows are extremely tight.

**What did the arrival of digital photography change for you?**

In the early days of working with AFP flash technology, I used Polaroids to check the results – it was crazy to see a few minutes later that the pictures

were no good, to have to organise a new outing for ourselves and the photo motif.

In comparison to that, professional digital cameras really are a blessing. I can check the results immediately, which allows me to be more experimental. And that is positive for the quality.

**You work with medium-format cameras and digital EOS cameras. Why did you choose Canon?**

I've been working with the Canon EOS system since 1989 when the analogue Canon EOS 1 came to the market. Air-

craft cause strong vibrations, and the EOS system with its fast auto focus and ultrasonic-motor driven, image-stabilised lenses offers significant advantages over the often far heavier medium-format systems, especially when working with telephoto.

My Canon EOS-1Ds Mark II and the Canon EOS 5D, which I work with in parallel to avoid time-consuming lens changes, are just as important as the motion-sickness pills that I need to keep working while constantly peering through the view-finder during wild manoeuvres.



**CLAES AXSTÅL** began his photographic career as a ski photographer in the Colorado Mountains. Even in those early days, the son of a Gothenburg photographic dealer used flash photography for action-packed backlit images in the snow. He literally experienced enlightenment when he had the idea of using fill-in flash for much larger moving objects for dramatic effect – that was one night when he saw a natural flash of lightning illuminate an aircraft. Today, the member of the »International Society for Aviation Photography« travels all over the world to capture dramatic, backlit photographs of fighter jets and the private aircraft and yachts of wealthy owners. [www.axstalphoto.com](http://www.axstalphoto.com)

**CAMERAS**

Canon EOS 20D | Canon EOS 5D with Battery-Grip | Canon EOS-1Ds Mark II

**LENSES**

EF 15mm 1:2,8 Fisheye | EF 50mm 1:1,4 USM | EF 24–105mm 1:4L IS USM  
EF 70–200mm 1:2,8L IS USM | EF-S 17–85mm 1:4–5,6 IS USM

**ACCESSORIES**

Extender EF 1,4x II | Speedlight 580EX



Claes Axstål had the idea of flash-lighting aircraft while flying in a thunder storm.



Flash missions are Axstål's speciality.

strong and, with a synchronisation time of 1/200 second, the biplane had to fly very close to us,« says Axstål, remembering. »We had no radio contact to the pilot, so we had to use hand signals to direct him onto the right course. Fortunately the pilot was the highly experience stunt flyer Jerry Edvardsson: The shoot was completed long before his fuel tank ran low...«

**The dream of flight**

Claes Axstål spends about half the year travelling. His customers are mainly aircraft and yacht manufacturers who want to present their products »in action« and with dramatic lighting. Wherever they are in the world, they fly in the man with the unique flash technology. »In the meantime,« says Axstål, »there are number of colleagues who work with flash, although their systems are of far lower power

and the mostly cannot handle backlighting situations. So if you see a picture of an aeroplane or helicopter in front of the sun, you can be almost certain that the picture is one of mine.«

As a saying goes, »Man was created to work as the bird was created to fly.« Claes Axstål, who at 18 had to give up his dream of becoming a Swedish air force pilot because he has to wear glasses, has found a way to combine the two thanks to his unique »Airborne Flash Photography«. The literally »improbable« images captured by the flying Swede are more than just things of beauty: They can be seen as a call to question the current limits of photography, never to be satisfied with the status quo but – through inventiveness, perseverance and the right equipment – to open the way to truly new dimensions.

