

>>> Flying the Alps: Take a dramatic lap around the Matterhorn!

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LightFantastique

When you combine a gazillion watts of portable flash power with a photographer clever enough to get the rig certified to light off inside aircraft, the results are as dramatic as they are beautiful.

By Dan Pimentel

Airplanista Editor

A camouflaged DC-3 lumbers along over Houston, Texas carrying a few friendly but very focused guys from Sweden in the back. They are crouched down near where the door used to be, and are surrounded by cables, wires, cameras, computers, giant flash reflectors, and what looks like a couple of pallets full of batteries. You can hear one of them shouting “gå stort eller gå hem” in Swedish. If you spoke their native

language, you would understand that they are saying “GO BIG OR GO HOME,” and yet be only partially prepared for what is about to happen next.

Just a few feet from the camera plane, a sleek jet appears, its pilot communicating by radio with the Swedes and the DC-3's pilot. Once in the perfect position, and after the lead photographer has determined distance with a laser and background light using a

Swedish aviation photographer



Claes Axstål was almost born with a camera in his hand. Over many years, he has developed an Airborne Flash Photography System that he uses around the globe to “challenge the sun” and create stunning images shooting directly into a picturesque sunset. **Below:** Axstål's system was responsible for this dramatic shot of a Sikorsky S-76 helicopter.



spotmeter, it is time to start shooting. At this point, it's probably a good idea for the pilot of the jet to not look directly at the DC-3, or his eyes might surely explode.

At the center of this shoot is Claes Axstål, an aviation and marine photographer known worldwide for his incredible air-to-air images showing entire airplanes awash in the glow of what looks like the light of a million suns. Axstål pulls the trigger and his proprietary Airborne Flash Photography (AFP) system begins trading electrons for candlepower, blasting enough light towards the jet to allow Axstål to shoot directly into a picture-perfect sunset

– a technique he calls “challenging the sun” – and in the next few moments, he will capture some of the most dramatic aerial images found on this planet, or any other.

Air and Space Smithsonian Magazine noted in an article that it was Axstål who used his AFP system on March 28, 2001 to become the first aerial photographer using this technique for air-to-air work. In the 10 years since first taking so much flash power into the air, he still remains well-respected and the only guy doing this sort of photography.

“I’ve seen a lot of exceptional photography gear as Chair of the International



Society for Aviation Photography,” said Jay Miller, “but no one, to the best of my knowledge, has a light set-up to compare at any level with Claes Axstål’s incredible aerial flash unit. His work stands alone in the aviation photography business. Others use flash units to accommodate fill requirements, but none can shoot shots like Claes’. His direct-into-the-sun aerial pictures are simply unattainable using any conventional flash system. This powerful light system has allowed Claes to create a niche in a market that’s jam-packed full of aviation photographers. Most of us who make a living photographing aircraft admire what he’s done. Until someone else creates their own version of Claes’s lighting system, he’ll be unrivaled in the rarified air of night time air-to-air (and air-to-ground) photography.”

To fully understand how Axstål has developed into a true world-class photographer, you must first know his lineage. Even before he could walk, early family photos show him in his father’s Gothenburg, Sweden camera store called Fotoman, playing with cameras and flashbulbs. Before opening that store, his father, Leif Axstål, was Store Manager for Victor Hasselblad – yes, that Hasselblad – so it was almost pre-ordained that Claes would grow up with a camera in his hand. It should be noted though that his favorite toy was indeed those flashbulbs and not the cameras, a sign, he says, that perhaps would explain his future accomplishments.

As a young man, Axstål wanted very much to become a pilot at the Swedish Air Force, but eyesight limitations changed those plans.

His professional photography career followed an assignment shooting skiing in the U.S. Rockies during the winter season of 1981/82. He earned a few assignments because of some quality flash pictures of skiers he had shown around. In the 20 years that followed, numerous photography magazines have written extensively about his ski photography using



Axstål's flash system is so huge, he has used it to light entire icebreaking ships. Because of the distance the light can be thrown by the system and the gigantic subject it can illuminate, on his list of airplanes he wants to photograph are the “large airliners.” I certainly hope the people at Airbus and Boeing are reading this article.

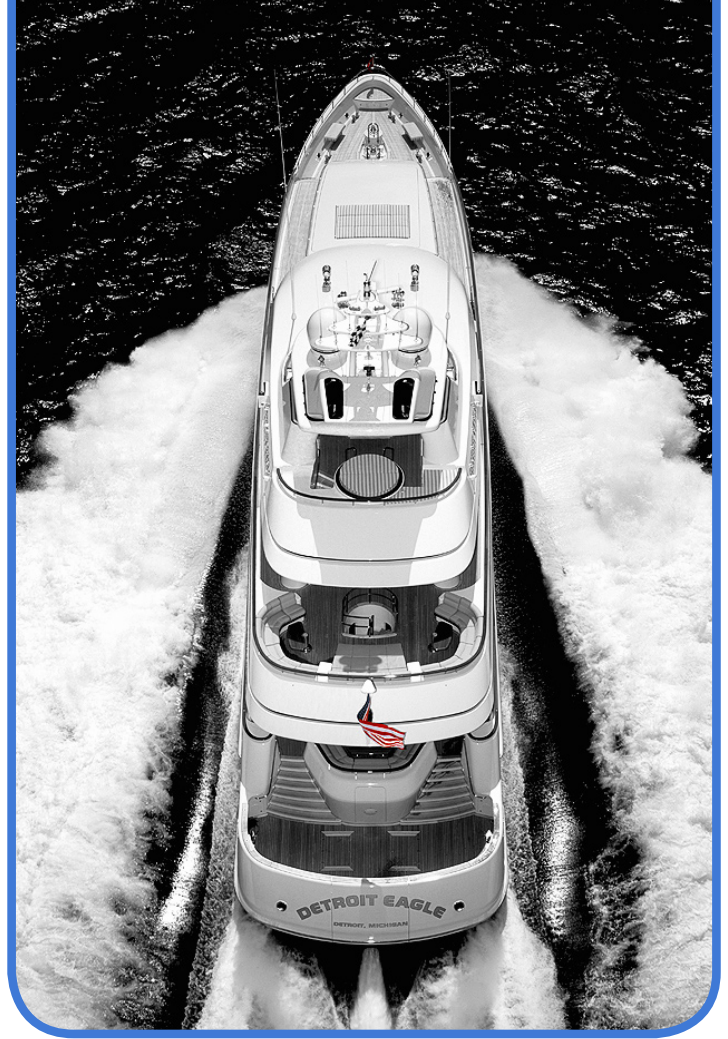


dramatic flash effects.

But as a lifelong aviation enthusiast, Axstål started thinking on a larger scale about aviation photography, and wanted to develop a “higher three-dimensional aviation business and hopefully better earnings.” He soon got to photograph a CH46 Vertol from the local air traffic tower, using a Mamiya RZ with a 210 mm lens. The flash equipment was four “off the shelf” Profoto 7B portable flash generators with two Twin heads. And when P.O. Olsson, the leader of the Swedish Air Force’s Team 60 Flight Demonstration Team, saw Axstål’s flash images of the Vertol, he had to have the same type of photos of his team. It was then that Axstål knew he was on the right track.

“I had seen ads in magazines of aircraft and boats with the gorgeous sunsets that people tend to like,” Axstål said, “but they were never able to show the product or people at the same time as the sun in the picture. I had created this effect before, shooting skiing on steep mountainsides, and while it was physical challenging for my body and camera/flash equipment, I began to imagine doing the same with fighter jets and boats. The only problem though was that there were not any portable flash units on the market powerful enough to do the job. And most certainly none that were approved to use while shooting from another aircraft.”

On one of those skiing photo shoots in Utah, Axstål was photographing his friend, Stein Eriksen, the Olympic Downhill Ski Champion from 1952, and met auto racing legend and mega-entrepreneur Roger Penske, who asked him to photograph his superyacht Detroit Eagle in the Bahamas. This was the shoot Axstål needed to catapult his aerial flash project forward. The system wasn’t even fully operational to shoot from a helicopter, but Axstål knew he could not miss such a special opportunity.



“I got some good help with the technical questions from Profoto in Stockholm,” Axstål explains, “since they were interested to see what could be done. But to be able to fly with such immensely powerful flash inside an aircraft, the flash system has to be shielded against the electromagnetic pulse caused from the flash strobes, so it had to be designed according to pre-determined rules. We tested the early versions of the AFP at Ericsson Microwave and got it approved by the Defense Administration. That was not an easy task, but I managed thanks to plenty of help from the Swedish Air Force.”

Today, Axstål’s AFP system has matured into a powerful method for illuminating anything from small planes to airliners, ships, heavy equipment, even buildings. It is such a specialized system, Axstål keeps the details secret about the flash heads and other key elements of



the AFP system. “You can see from the photos of me inside the camera ship that I use Profoto Magnum reflectors, but there the similarities with normal studio flashes stop,” he said.

However, the evolution of Axstål’s AFP system has not stopped, in fact it possibly has only just begun. “I started with stock portable studio flashes and built a kind of stadium light rig,” he says. “They were big and bulky but not that powerful and I used the rig to shoot boats from rocks and from boat to boat. Then I got a very kind visionary investor who helped me form a company so I could design, build and test some powerful working equipment. My latest gear, which is 10 years old, is more durable and reliable than the first ones. It is however, still very heavy so not all helicopters can carry the system and fly very well. My current AFP System is stone age equipment

compared to what I have in my head. I have so many thoughts and dreams that would give photographers tools to be much more technically creative, with flash for both action photography and still life work.”

Axstål’s equipment list is an eclectic blend of sizes, resolutions and technologies. “For much of my helicopter photography,” he said, “I’ve used many bodies, including Hasselblad H1, Mamiya 7, Mamiya RZ Pro II, Fuji GX617 Panorama, Fuji GS and GW 690 cameras. Now lately I have used Canon EOS 20D, 5D and 1Ds MK2. But my favorite setup has been the Horseman SW-D Pro II camera with a large format Rodenstock lens and LEAF digital back. In addition I use a Kenyon Gyro Stabilizer when it gets really bumpy.”

When Axstål shows his images shot with the AFP system to people for the first time,





the reaction is often predictable. “When I bring out the pictures at an air show,” Axstål explained, “people often think that the pictures have to be Photoshopped. But when I explain that they are real, they are even more amazed. Sometimes I say that it’s not my pictures that look Photoshopped, it’s the Photoshopped images that look like mine, since mine are real! The others are just fantasies harnessed by software designers.”

While the AFP system can take up a large amount of space in the camera plane, Axstål has shot from smaller platforms with a partial system. “My favorite chase plane I have used to date,” he said, “is Rick Sharpe’s DC-3 *Spooky* we used for a shoot at Hobby Airport in Houston for Million Air. Any planes that have a ramp like the C-130 are preferable to use. For the Swedish Coast Guard shoot, we used a EADS Casa which was nice, but not really fast enough. The Saab SK60 of the Swedish Display team, Team 60, was my first photo platform and if you could modify it to carry more equipment, it would be the perfect chase plane for some angles. When talking about helo-platforms, the EC 350 is outstanding, and recently I used the Hughes 500 which was a great aircraft! Unfortunately, I have not shot out of a Sikorsky S-76 yet, but did use a CH-53 Stallion, which has a great ramp that was used to shoot dog fighting between F-18s and Mig-29s over Pedemünde.”

While Axstål has photographed a number of aircraft, there are still a few on his short list that have eluded him so far. “I would love to shoot the F-22 Raptor and Joint Strike Fighter (JSF),” says Axstål. “Talking about civilian aircraft, I would like to photograph a really big one, since I have proven that I can illuminate even a large icebreaking ship. And of course, I’d like to photograph Sir Richard Branson’s Virgin Galactic WhiteKnightTwo and SpaceShipTwo, it would be fun to show him [Branson] the power of my technique.”

In any profession, you must do two things to be successful on a world stage. First, you must do something nobody else is doing as a pioneer and game changer. And second, you must define your niche, leading the pack, not following. Success comes when you accomplish things deemed impossible by others.

In the business of aviation photography, Claes Axstål does all these things. He has carved out a niche nobody else occupies, using a state-of-the-art system he invented and perfected. He lives up to the idea of “gå stort eller gå hem,” and has solid plans for the future...bigger subjects, more light, faster airplanes, and yes, even space ships.

To boldly go where no man has ever used extreme flash before. Is space the next frontier for Axstål?

I would not bet against that.

