A Pilot’s Guide to
Cold Weather
Starter & Alternator
Operations

Aerial Photography
for Fun and Profit

Avionics Tools for
“Light” IFR Aircraft
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There’s simply no greater vantage point than that offered from the air. So, it stands to reason, that if you want to get some really revealing photos you’ll want to take them from above. However, there’s a whole lot more to aerial photography than just grabbing your camera and taking to the air. First and foremost, you need to determine how the photos you take are going to be used.

“We have found that the people who hire us are looking for information,” said Jim Todd, president of Todd Photographic Services (www.toddphoto.com) in the greater Phoenix area. “Jim is absolutely correct,” added Mike Buben, who owns and operates Aerovision Arizona (www.aerovisionarizona.com). “Many of the clients we serve include NASA, and various municipalities. The photos we take allow them to answer a plethora of questions about the area.”

Sherry Eklund, of Desert View Aerial Photography (www.dvaerialphoto.com) in Mesa, Arizona said that businesses are major clients as well. “This includes commercial realtors and contractors who want to keep a record of their progress.”

As you have undoubtedly ascertained, all three of these experts are professional aerial photographers. As such, some of the challenges they face revolve around the business side of things—like marketing and building (and keeping) relationships with customers. However, there are also challenges in regard to the “flying” aspect of the business, including airspace accessibility and, of course, the weather.

“We have learned that accessibility to airspace is an ever-changing variable—especially in regard to Sky Harbor Airport,” Buben explained. “Mike’s right,” Eklund interjected. “In fact, my husband, Brett, finds it necessary to work with both Sky Harbor and Luke Air Force Base in regard to airspace availability.”

As for weather-related issues, at least in the Phoenix area, all agree that July and August can be particularly challenging, with often unpredictable (and sometimes violent) monsoons and haboobs (sand or dust storms).

Another thing on which our experts agree is that Cessnas are, by far, one of the better aircraft to use, though each admitted they have their personal favorites. “I prefer the Cessna 172 with its retractable gear,” Todd shared. “However, the most ideal is pretty apt to be the Cessna 210. It has no wing strut (to interfere with the shots) and retractable gear.”

“We found a 1968 Cessna 182 Skylane that is just perfect for what we do,” Eklund said. “It has a good photo platform and it’s a little faster from site-to-site.”
“My craft of choice is a Cessna 180 Skywagon which has been modified to include a camera hole,” said Buben. “It has fixed gear, but it’s far enough forward that it doesn’t present any problems.”

While your craft is undeniably an important part of the equipment needed for aerial photography, so is the camera you use! Our experts all agree that Canon has a really good product - whether it’s the 6D or the Mark II High Definition Digital - Canon has a truly astonishing array of professional cameras.

“The thing is, taking photos on your way to a destination is not the same as doing ‘aerial photography,” cautioned Eklund. “If you find that you’re interest is more along the lines of taking photos from the air than actually getting involved with aerial photography, you’re looking for different equipment.”

According to Ryan Deck, Avionics Sales Manager at Aircraft Spruce, “The main player in recreational aviation photography is the GoPro.” In fact, the GoPro is the recreation camera of choice for participants in all types of activities. As a result, they need to be adapted to an aircraft and, the purchase price of $299-$399 does not include the accessories you need to mount it to your craft. “It can be mounted internally or externally, but if you choose the external option, you’ll need a remote control unit as well,” explained Deck.

Though GoPro’s technology and offerings continue to evolve, the most current edition is the Wi-Fi enabled, HERO3 Black Edition. Among its more important and impressive features are:

- A smaller, lighter size (at 2.6 ounces, it’s 25% lighter and 30% smaller than previous models)
- Video performance that is 2X faster than previous models
- Photo performance that is 3X faster than previous models
- Decreased distortion
- Built-in Wi-Fi (Wi-Fi remote included)

As mentioned, you will need to purchase various accessories to get the most out of your GoPro. Such “extras” generally cost somewhere between $100 and $150. Visit www.aircraftspruce.com to check out which GoPro (and accessories) best fit your needs.
6 Expert Tips

I asked each of our experts to give some final thoughts, recommendations, and words of advice for those considering aerial photography. Here’s what they had to say:

1. Sometimes it’s a better business decision to lease your plane (and hire a pilot) rather than to own. In the event of any down time, the costs of plane ownership (hangar space, for example) continue to accrue.

2. Work/fly during the early morning or late afternoon. The shadows not only give a great effect, but also provide better depth and definition.

3. Make sure your camera has quick shutter speed.

4. Know where you are going and “plan your mission.” Flying in a rural area is far different than being in Bravo Airspace.

5. ALWAYS be conscious of safety. Don’t get so distracted looking for your target that you lose sight of what’s going on in the air around you.

6. If you want to become an aerial photographer, remember that you will need a Commercial Pilot’s License.

While GoPro is the current champ, Deck said that there is a challenger on the horizon. Interestingly, that “challenger” is GARMIN! Their entry into the fray is the VIRB Elite which touts not only a long battery life and better stability, but the fact that the VIRB can be used under water! “Battery capability is a most important issue, especially if you’re going to have your camera mounted externally,” Deck explained. “You can’t just reach out and change the battery while you’re flying at eight thousand feet,” he added with a chuckle.

Another important consideration Deck mentioned is the size of the memory card. Obviously, the larger the capacity, the more photos and/or video “footage” you can get. As the GoPro can do either video or still photos, card size is a major consideration.

If someone wants to seriously consider getting into aerial photography (as opposed to just taking pictures from the air) Todd is putting together a “franchise package” that can help them get started. He went on to explain that an ideal candidate for such a business would be a retired pilot who lives in or near a growing city. The package would include all of the necessary equipment and “secrets” of the trade, like how high to fly to photograph a square mile of area down below. He’d also provide marketing tips, including how and to whom to market the service. Interested parties are encouraged to email him at jtodd@toddphoto.com.