Choosing Between Local File Sharing and a Shared Aerial Data Workspace

Why the Way You Share Aerial Data Matters

When drone pilots finish a flight, the real work often begins: getting the captured data to a client or a team in a form they can actually use. For years, the default was local file sharing, copying raw files onto a hard drive, uploading them to a cloud folder, or sending them through a file-transfer service. But as aerial data grows in size and complexity, more pilots and their clients are turning to a hosted aerial data platform that handles processing, hosting, and visualization in one place. Each approach has its strengths, and the right choice depends on the job, the client, and the data itself.

Local File Sharing: Familiar but Limited

Local file sharing is the simplest way to move data from a drone to someone else. You copy the raw images or video files to an external drive, upload them to a shared folder on something like Google Drive or Dropbox, or use a transfer service like WeTransfer. The client downloads the files and opens them in whatever software they have. It works, and it feels straightforward because it uses tools people already know.

The catch is that raw drone data is rarely ready to use. A folder full of hundreds of JPEGs or a massive video file doesn't tell a client much unless they have the right software and the skill to process it themselves. Many clients are not drone specialists; they want a map, a 3D model, or a report, not a pile of individual images. Local file sharing puts that processing burden on the client, which can slow down decisions and create frustration on both sides.

File size is another growing issue. Modern drones produce orthomosaics, point clouds, and high-resolution video files that can be many gigabytes per flight. Uploading and downloading those files over standard internet connections takes time. Large files can also exceed the size limits of free file-sharing services, forcing you to pay for premium accounts or split data into multiple transfers. And once the client downloads everything, they still need to manage their own storage, back it up, and keep track of versions.

There are also security considerations. Sending raw files through email or unencrypted links can expose sensitive data. Even password-protected links add another step for the client and are not foolproof. Local file sharing works best when the client is tech-savvy, the data set is small, and the timeline is flexible.

What a Hosted Aerial Data Workspace Offers

A hosted aerial data platform flips the model. Instead of sending raw files, you upload your data to a central online workspace where it is processed, stored, and made viewable through a map viewer or 3D interface. The client does not need special software or a powerful computer; they just need a browser and a link. The platform handles the heavy lifting, building the orthomosaic, aligning the point cloud, or stitching together the time series of images.



This approach changes the conversation between pilot and client. The pilot can share a live, interactive map that the client can pan, zoom, and measure on their own. If the job involves monitoring a construction site over weeks, the platform can store multiple time-series flights so the client can compare layers side by side. Annotations can be added directly on the map to mark issues or areas of interest, and the whole project can be exported as a polished project report without anyone having to assemble screenshots manually.

Data hosting is built into the platform, so the client never has to worry about where the files live or whether they are backed up. The pilot controls access, revoking or granting permissions as needed. This is especially useful for projects with multiple stakeholders, an engineer, a project manager, and a landowner might each need a different view of the same data. With local file sharing, you would have to send separate copies and manage version control yourself.

When the Workspace Wins

The hosted workspace shines on larger projects or repeat work. If you are flying the same site every month for a year, the time series view alone saves hours of explanation. The client can see change over time without digging through folders of dates. The platform also handles the annotation workflow: you can mark a drainage issue in the map viewer, attach a note, and the client sees it immediately in context. No more email threads with screenshots and coordinate descriptions.

Another big advantage is the project report feature. Instead of manually compiling images, measurements, and notes into a PDF, the pilot can generate a structured report from the platform. The report includes the orthomosaic, key measurements, annotations, and a summary of the flight. This professional presentation often makes a stronger impression on clients and saves the pilot significant admin time.

Comparing the Trade-Offs

Local file sharing still has its place. For a one-off job with a small number of images, where the client is comfortable processing their own data, it can be faster than setting up a workspace account and uploading files. There is no learning curve for the client, and no dependency on an internet connection after the download is complete. If the client needs the raw files for their own specialized software, local sharing is the only option.

But as data volumes grow and clients expect more polished deliverables, the hosted workspace becomes increasingly practical. The cost of cloud storage and processing is usually built into the platform, so the pilot does not need to buy expensive local hardware or software. And because the data lives online, the pilot and client can access it from anywhere, on any device.

There is also a collaboration angle that local sharing cannot match. With a workspace, multiple people can view the same data at the same time, add their own annotations, and see each other's comments in real time. This is valuable for teams reviewing a project before signing off. National Drone Services provides a platform that brings these capabilities together for FAA-certified pilots, giving them a way to deliver aerial data through a shared processing, hosting, visualization, and reporting environment. That kind of setup turns a one-time data transfer into an ongoing working relationship.

Making the Choice

So when do you use local file sharing, and when do you move to a hosted workspace? The answer depends on three things: the client's technical comfort, the size and complexity of the data, and the need for ongoing collaboration.

- **Client technical comfort:** If the client regularly works with raw drone data and has their own software, local sharing may be fine. If the client is a project manager who just wants to see the map and approve the work, a workspace saves everyone time.
- **Data size and complexity:** A single orthomosaic for a small property might be manageable as a download. A multi-site project with hundreds of images and a point cloud is much easier to view and share through a hosted platform.
- **Need for collaboration:** If the project involves multiple reviewers, annotations, or a time-series comparison, the workspace is the clear winner. Local file sharing becomes a tangle of file names and email threads.

There is also the question of professional presentation. A client who receives a link to an interactive map with annotations and a generated project report sees a higher level of service than one who gets a download link to a zip file. That difference can lead to repeat work and referrals.

Looking Ahead

The trend in aerial data is toward larger files, more frequent flights, and higher client expectations. Local file sharing will always have a role for quick, small transfers, but more pilots are adopting a hosted aerial data platform as their primary delivery method. The platform handles the processing, storage, and presentation, so the pilot can focus on flying and client relationships rather than file management.

For pilots who are certified and looking to grow their business, the ability to deliver professional, interactive data packages is becoming a standard expectation. National Drone Services connects those pilots with clients and provides the workspace tools to make that delivery seamless. Whether you choose local sharing or a hosted platform, understanding the trade-offs helps you match the method to the job, and keeps your clients coming back.