

Aerial Photography Is Basis Of Sidwell's Mapping Services

One of the most critical factors in Sidwell's ability to produce accurate maps is its expertise in aerial photography — a blending of advanced technology and highly skilled personnel.

Bob Nelson, Aerial Services Manager, explains the planning that precedes the aerial photographing of a specific county. "Our people will do a high flight over the entire county," he relates. "Then they will do a low flight over any recorded subdivision and photograph entire cities of any size."

The process begins with a set of USGS (United States Geographical Survey) quadrangle maps. From these, the team will plan its flight lines. Also helpful are county maps showing major roads. Since most counties are rectangular and have townships that contain 36 sections, the team will fly across the county three times for each of the townships on its high flight. Then the low flight lines are designated. The flight lines are drawn on maps for the pilot and photographer.



Jim McGraw prepares for a photo flight by setting in place Sidwell's state-of-the-art camera equipment.

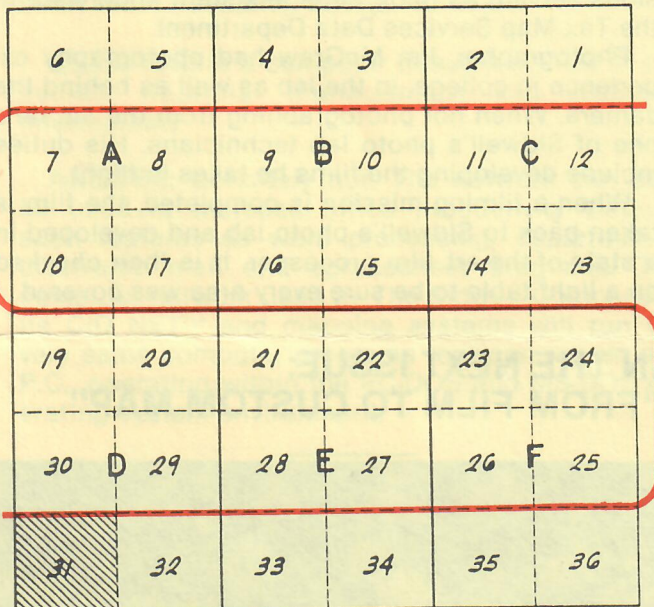
Property or assessment mapping aerial photography can be done during just two periods of the year — early spring and late fall. For optimum quality, photographs must be taken when there is no snow on the ground, no leaves on trees, no flooding or standing water and no haze or clouds. The sun angle must be more than three hours from the horizon. One of the crew's greatest challenges is to decide, on a given day, whether to go up and hope they will be able to shoot.

"On our low flight, we can skip around," says photographer Jim McGraw. "If there are clouds over one area, we can go on to another. However, on the high flight, we need large areas that are completely cloud-free.

"In some instances, the weather station is 50 or 60 miles away from the county we are going to shoot. When they report the weather is 'clear', they may mean there is only a cloud here and there. That's not the kind of clear we need. We may fly out to the site and find it isn't what we need, and have to fly right back.

"One thing we've learned is not to make plans during the photo season. We don't expect our weekends to be free, and we can't make plans for Thanksgiving and Easter. When the weather says 'shoot,' we shoot."

Sidwell flies two Cessna 206's. Its camera for high flights is a 6-inch Zeiss. On low flights, a 12-inch Zeiss is used. Until recently, there were only five of these precision cameras in the United States, of which Sidwell owns two.



NW 1/4	NE 1/4
A B	C D
SW 1/4	SE 1/4
E F	G H

TYPICAL SECTION BREAKDOWN
 1" = 100' SCALE ONE-EIGHTH SECTION MAPS
 COVERING 80 ACRES OF LAND
 MAP SIZE 20" X 30"

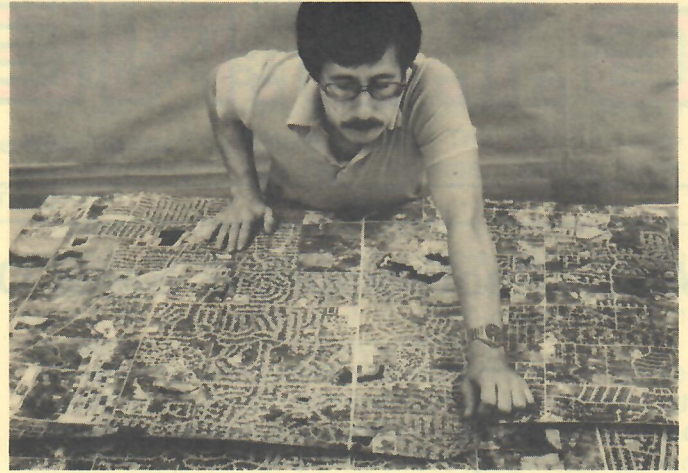
The team of pilot and photographer flies to its destination, sometimes refueling there to give maximum uninterrupted flight time in the photo area. Proceeding from the designated starting point, the pilot flies his planned flight line. Initially there will probably be some drift because of the wind. Together the pilot and photographer figure the strength and direction of the wind and make a one- to three-degree correction.



Sidwell pilot Bill Syring doubles as a member of the Tax Map Services Data Department.

The pilot generally focuses on a point on the horizon and flies to that point. The pilot can't look around very much because the photographer's viewfinder must remain exactly in the designated strip. One of the most challenging areas is a county that is hilly and doesn't have a lot of roads to help the pilot maintain his flight line.

"I suspect people would be very surprised at the map a pilot uses for flying over a county," says pilot Bill Syring. "They'd wonder how anyone could fly straight lines. There's a lot of instinct and a lot of seat-of-the-pants knowledge involved, and just being able to fly a plane doesn't mean someone is qualified for this kind of work."



On the ground, Jim McGraw painstakingly pieces together a photo mosaic.

There is a great deal of communication between the pilot and photographer. Having spent nearly 1000 hours together in the air, McGraw and Syring have learned to communicate efficiently, avoiding many costly re-flights.

Bill Syring began flight training in 1977. He planned to become a missionary pilot which requires the same type of flying skills as photographic survey flying — navigating by ground references rather than by instruments. He has also graduated from mechanic's school and is a rated airframe and power plant mechanic. Bill is responsible for all maintenance of Sidwell's planes. Besides serving as pilot, he is assistant supervisor in the Tax Map Services Data Department.

Photographer Jim McGraw had photography experience in college, in the lab as well as behind the camera. When not photographing from the air, he's one of Sidwell's photo lab technicians. His duties include developing the films he takes in flight.

When a filming mission is completed, the film is taken back to Sidwell's photo lab and developed in a state-of-the-art film processor. It is then checked on a light table to be sure every area was covered.

**IN THE NEXT ISSUE:
"FROM FILM TO CUSTOM MAP"**



Denise Boyd Leads Property Description Class

In conjunction with the Michigan Assessors Association, Denise Boyd, Client Services Representative for The Sidwell Company, recently had the pleasure of being involved as an instructor for a course on Property Descriptions.

Each year, the M.A.A., in conjunction with the University of Michigan, sponsors a variety of classes to promote continued education and professionalism in the field. The course on Property Descriptions is designed to aid the assessment official in preparation of the Assessment Roll.

Bob Fults of the Ingham County Mapping Department also helped instruct the course. He was responsible for teaching description closures and keeping Denise "straight" on Michigan practices.

Thirty-three officials from different jurisdictions participated in the class. Some took it as a refresher course. Others just getting started in the assessment field learned how to locate property, identify it and describe it so it can be found again. They learned how to read deeds, plats, and surveys. Techniques for drawing curves, angles, and for calculating acreage were also illustrated.

The object of writing a good property description is to translate a lengthy or obscure legal document into a concise and precise description, then to place that description in its proper place within the jurisdictions' property inventory assessment.

"Knowing that most of the assessment officials were not engineers, I taught the basic bread-and-butter techniques for getting the daily work done," says Denise. "There are as many ways to write descriptions as there are assessors. We gave them the basic parameters to work within, showed them how to develop their own style, and above all, how to keep it simple."

Denise Boyd learned most of her mapping skills while at The Sidwell Company. She has experience in mechanical and architectural drawing and in computer-aided design. Her responsibilities include extensive consulting on mapping projects and computerized land records management systems.

"I enjoyed teaching the course," she says, "It's fun working with maps and descriptions, but more important, sharing that knowledge with a good group of professional people."

OUR CLIENTS ASK...

Certain questions are often addressed to Sidwell representatives. Here are some of the answers to those most frequently asked.

QUESTION: Is a computer network limited to tax cycles, financial management and mapping information?

ANSWER: Definitely not. The network can also be used to increase office productivity through such features as word processing, departmental electronic mail and spreadsheet programs. The computer network used by The Sidwell Company in its CID NET™ and mapping systems will run the very same computer programs that can run on any P.C., operating within the PC-DOS and MS-DOS operating system environment.

QUESTION: Besides adding efficiency and accuracy, how else can the CIDS Network system be of value to our offices? And to the public which ultimately pays for it?

ANSWER: One of the biggest complaints of taxpayers, title companies, abstractors, and even county office personnel is that they have to go from office to office to gather key information on a property. Often they find themselves sent back to the first office. With the integration of CID NET™, recorder's information is available to the auditor, treasurer and assessor. Assessor and treasurer in-

formation is available to the other offices, etc. It all comes from one central location and is available in each area on a computer screen.

In addition to greater taxpayer satisfaction and confidence, recorded document books, assessor's books and tax lists are readily available for use by courthouse personnel.

QUESTION: What if I forget how to use a user command in one of Sidwell's computer systems?

ANSWER: Just choose the kind of help you need from the menu on the screen. Then select the user command. An explanation will appear on the screen.

QUESTION: When writing reports within the CID NET™ system, can one change the printing style to print letter quality, compress or other types of print styles? How can I learn more about the printer's capabilities?

ANSWER: All reports generated on the system feature an easy-to-use printer report menu. The user can easily select the desired style of print. Each printer comes with a quick-reference manual which explains the many different features. The Sidwell Company also provides printer training group sessions in each of the counties where it installs a system.

Karr Completes Twenty Years

One of Sidwell's valued employees, Carole Karr, recently completed 20 years with the Company. She joined Sidwell on October 3, 1968. Her first responsibility was doing mechanical lettering on maps. Today she is Supervisor of the Graphics Department.



Much of Carole's enjoyment of her job comes from the satisfaction she derives in seeing the finished product in which she has been involved. Meeting deadlines continues to be one of her greatest challenges.

Tim Hopkins, Director of Geographic Information Systems, says, "Many of our talented people in key positions today started their careers at Sidwell working under Carole's supervision. She has a unique ability to instill excellent work ethics in her employees while maintaining a productive, enthusiastic work environment throughout her department. Carole's common sense approach to her job makes it a pleasure to work with her on both a professional and personal level."

SIDWELL REPS SHOW SPEEDY SET-UP

At the Fall Iowa State Association of Counties meeting in Des Moines, Iowa, The Sidwell Company decided to test the old adage, "Seeing is believing."

Sidwell representatives set up a complete P.C. network at their booth for people attending the meeting. It included four IBM work stations, an IBM model 80 file server and a graphics workstation containing the mapping capabilities.

Viewers were impressed to see that the complete system was set up and running in half an hour. The system clearly demonstrated the versatility, flexibility, and simplicity of a Sidwell P.C. network.

"It drew a lot of interest," reports a Sidwell representative. "People asked a lot of questions, such as what type of software do you have? The display was very helpful to people who know very little about this type of system."

Conference Countdown

Here are some of the dates and places where Sidwell representatives will be on hand to answer your questions. Come see us!

- The Sidwell Company's
- Illinois Users Meeting..... Feb. 7
- Illinois Property Assessment Institute..... Mar. 6 - 8
- Iowa State Association of Counties Mar. 6 - 10
- Illinois County Officials Meeting April 24 - 26
- N.C.R.A.A.O. June 7 - 9



At the Fall ISAC meeting, Sidwell representatives were pleased to have the opportunity to wish John Fromm well. John is retiring from many years' service on the Board of Supervisors in Cerro Gordo County, Iowa.

From left: Neal Carpenter, Sidwell Customer Engineer; Willard Gisel, Cerro Gordo County Supervisor; John Fromm; Sam Argus and Cerro Gordo County Recorder Jeanne Argus; Bob Ermer, Cerro Gordo County Supervisor, and Randy Kobiella, Sidwell Customer Engineer.

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FOR FURTHER INFORMATION ON ANY SIDWELL SERVICES ...

Write to The Sidwell Company, 28W240 North Avenue, West Chicago, IL 60185 or phone (312) 231-0206