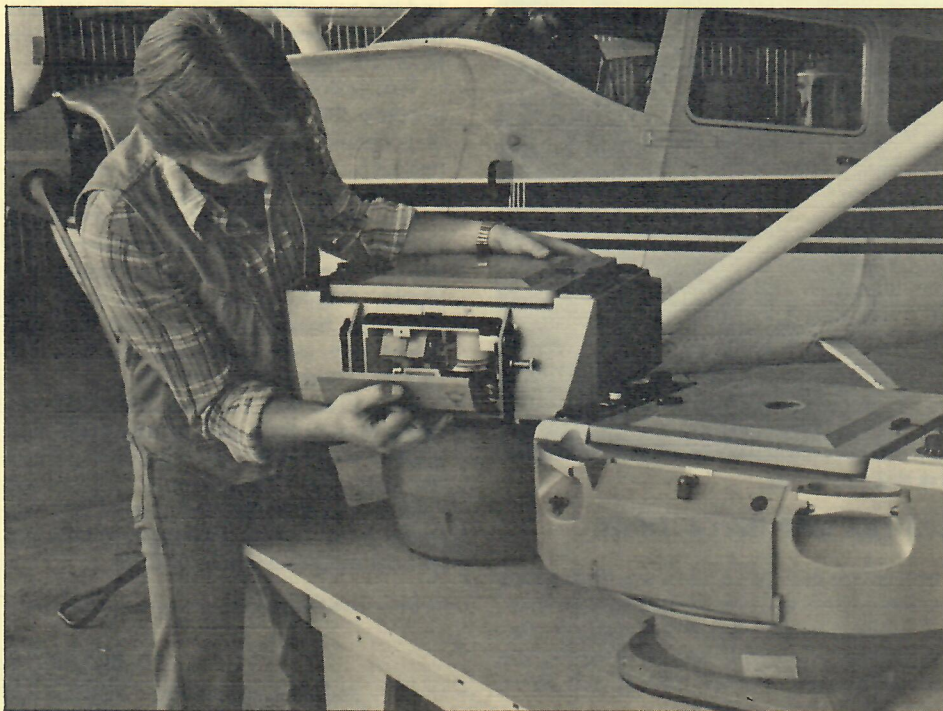




map news



Sidwell Technician checks out aerial cameras.

AERIAL PHOTOGRAPHY IS MORE THAN TAKING PICTURES

Imagine riding a bicycle up and down the middle of busy Michigan Avenue in Chicago, with cars, cabs and buses coming at you from all sides. Sounds crazy, right? An airborne version of this situation is faced each time Sidwell's flight crews photograph a project near the world's busiest airport, Chicago's O'Hare Field.

Terminal Controlled Area is huge "funnel"

With over two thousand arrivals and departures each day, there are very strict regulations which all aircraft must obey when operating in the air space controlled by O'Hare. The controlled area is known as the TCA (Terminal Controlled Area) and extends approximately 25 miles in all directions from the airport. THE TCA can be described as a huge "funnel" that slopes in toward the airport. It is possible, however, to fly below or outside this area without a clearance. This is because the altitude of the TCA changes the further you are from the airport. For example, at a distance of 20 to 25 miles from the airport, the controlled air space is between 3,600 and 7,000 feet. At a distance of 15 to 20 miles, it is between 3,000 and 7,000 feet. The uncontrolled air space continues to decrease until you are within five miles of the airport. Within this area, all aircraft must be under approach control if operating under 7,000 feet.

For Sidwell crews, completing an aerial survey mission involves more than flying over an area and "taking pictures."

Specially modified aircraft are needed, along with precision calibrated cameras, costing as much as \$100,000 each.

Fall and Spring are "fly times"

Next, most flights must be taken within two short photography seasons. These are during the Fall and Spring, when the leaves are off the trees and the ground is not covered with snow. The available photography time during these short seasons is further reduced since the sun must be more than three hours above the horizon.

Weather conditions play a crucial role in aerial photography. Clouds, high winds, and haze result in poor photo images and unacceptable film. Even if the season and weather conditions are just right, special arrangements must be made for projects located within the Terminal Controlled Area of O'Hare Airport.

Photo mission begins with weather check

A photo mission begins with an early morning check of the current weather conditions over the project site. If conditions are favorable, a call is placed to the control tower and the location of the project is reported in terms of flight altitude, and the distance and azimuth (direction) from the airport. This information defines the air space of the photo mission. The tower may grant a tentative clearance at this time, based on the amount of commercial traffic that is expected and the runways to be used for arriving and departing flights.

Armed with detailed flight maps showing the number and orientation of flight lines needed to cover the project, the crew takes to the air. Before climbing to flight altitude, a final clearance to enter the TCA must be obtained from the air traffic controller. Sidwell pilot Doug Frede, notes that this can often be frustrating since you are put into a holding pattern until the controller decides if he can sandwich you in among the other traffic in his sector. Once approval is granted, the crew flies across the project in a series of parallel lines at a predetermined altitude taking the photography.

Corrects photo distortions caused by turbulence

In addition to holding an exact heading and altitude, the effects of clear air turbulence must be controlled to minimize photographic distortions caused by the tilt of the aircraft. Throughout the flight, the pilot and photographer work together as a team. The photographer checks the progress of each flight line by viewing the ground through a device known as an intervalometer. Similar to a bomb site, the device tells the photographer if corrections are necessary to stay on the flight line.

The air traffic controller monitors the progress of the flight on his radar screen. If commercial traffic starts to interfere, the crew may be asked to leave the flight line and proceed on a designated course away from the area. Doug says that when the traffic is a "747" closing in at the rate of 250 miles an hour, you don't mind stepping aside.

Although taking aerial photography is not easy, the results in terms of the amount of detail recorded are well worth the effort.

HARRIS NEW ILLINOIS REPRESENTATIVE

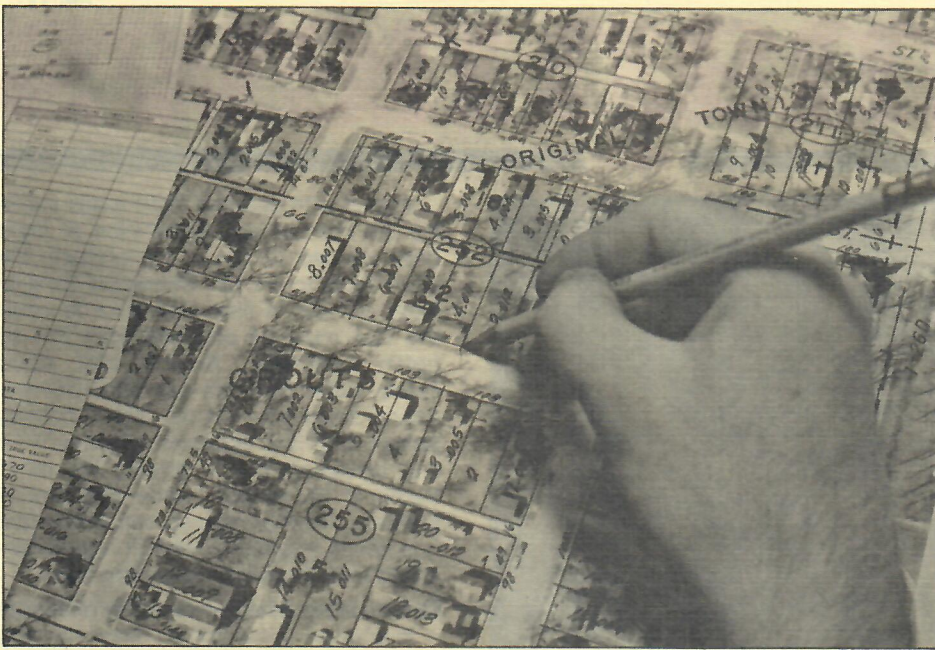


Mr. Bruce Harris has been named Sidwell's new Illinois tax map representative.

Bruce, who joined Sidwell in 1973, has had various assignments with the Company including the Printing Department, and marketing of county lease atlas services.

As the Illinois representative, Bruce will serve as a consultant to county and township governments regarding aerial photography, soil computation services, tax mapping and parcel numbering systems.

If you have questions concerning any of these services, you can reach Bruce by calling 312/231-0206.



New aerial photography keeps Washington County's tax maps up to date.

WASHINGTON COUNTY PROTECTS TAX MAP INVESTMENT

As soon as the leaves fall, a Sidwell flight crew will begin taking new aerial photography covering all of Washington County, Illinois.

The new photography will be used to replace the aerials that were part of the original tax mapping project Sidwell prepared for the County in 1971.

Aerial photos a tool for up-to-date assessments

Although Washington County is predominantly rural, Supervisor of Assessments, Warren Stricker, says the aerial photos, which match the tax maps, are

one of the best tools he has to make sure assessments are accurate and up-to-date.

Warren notes that the County's map investment is protected by keeping the maps current and by having the aerial base reflown periodically.

New photos will show changes in land use

Using the new photos, Warren will be able to spot changes such as new subdivisions, changes in tillable and nontillable acreage, new construction, new ponds and lakes and acreage removed from production due to erosion control.

OWENS NEW COMMERCIAL SERVICES REPRESENTATIVE



The marketing of Sidwell's county tax map lease atlas service is now being handled by Mr. Derrel Owens.

Darrel, whose background includes work in our Tax Map Department, will service customers in Kent County, Michigan and Cook, DuPage, Will, Kane, McLean, St. Clair, McHenry and Champaign Counties, Illinois.

For information on any of these counties, you can contact Derrel at 312/231-0206.

EDITOR'S NOTE

Now is the time to schedule your new aerial photography. We'll be ready to take off for the Fall flying season in just a couple of months. Don't miss this chance to update your old maps or to get detailed coverage of new areas.

REINVENTING THE WHEEL

In the past several years, there has been a lot of interest in using farm productivity for assessing rural property. The theory being that the value of a farm should be based on its ability to produce crops and not on its inflated value as a site for residential or commercial development.

This idea was put into a directive which reads: "To survey more than 100 million parcels, to classify these parcels by the fertility of the soil, and to evaluate the productive capacity of each one; to bring together under the name of each owner a list of the separate parcels which he owns to determine, on the basis of their total productive capacity, their total revenue and to make of this assessment a record which should thereafter serve as the basis of future assessment."

Sounds like your state tax commission doesn't it? Wrong. That task was assigned to a special commission in 1807 by none other than Napoleon Bonaparte!

(Reprinted from: Need for a Multipurpose Cadastre, prepared by the Defense Mapping Agency.)

PHOTOGRAPHY SEASON TO START SOON

The opening of school is a sure sign that Fall is here. It's also a sign that the Fall flying season will start soon.

As soon as the leaves are off the trees and the ground is visible from the air, Sidwell flight crews will begin taking new aerial photography.

This precision aerial photography will become the starting point for a variety of projects. These include orthophotos, mosaics, topographic maps and base maps for county tax mapping projects.

Bob Meiborg, Sidwell's Vice President of Aerial Services, cautions against waiting until the last minute to schedule new flights. Project specifications and fees should be finalized now so that the flight crews can take advantage of the first favorable weather conditions.

Bob notes that although aerial photography is a critical part of any project, it usually represents only a small part of the final cost. Consequently, he advises clients to schedule their aerial photography even though the mapping may not be needed until some later date.

JERRY JOHNSON ADDRESSES NACO



"Upgrading Property Tax Assessment Practices" was the topic of a recent National Association of Counties concurrent session addressed by Sidwell's Vice President of Marketing, Jerry Johnson.

Jerry's presentation highlighted the need for adequate property records such as aerial based tax maps. He also explained the use of a permanent parcel numbering system for computer processing of property information.

NEW ATLASES AVAILABLE

The 1981 edition of the Champaign, Kane, St. Clair, DuPage and McHenry Counties, Illinois tax map atlases are now available. The bound volumes contain reduced-size copies of the official county tax maps showing all property.

These atlases are ideal for realtors, attorneys, banks and others who need up-to-date property information.

For more information on these and other county atlases, contact Mr. Derrel Owens at 312/231-0206.

FOR FURTHER INFORMATION ON ANY SIDWELL MAPPING SERVICES . . .

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