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The California Surveyor

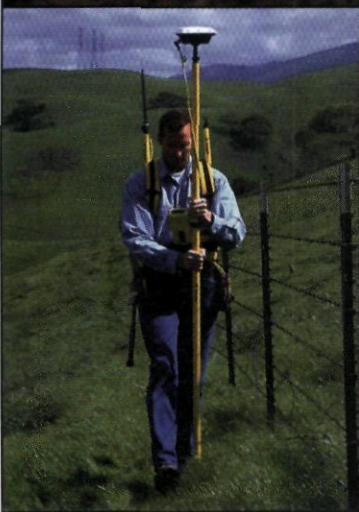
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NO.113



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The California Surveyor

is the quarterly publication of the California Land Surveyors Association, Inc. and is published as a service to the land surveying profession of California. It is mailed to all Licensed Land Surveyors in the State of California as well as to all members of California Land Surveyors Association, Inc. The California Surveyor is an open forum for all surveyors, with an editorial policy predicated on the preamble to the Articles of Incorporation of the California Land Surveyors Association, Inc. and its stated aims and objectives, which read:

"Recognizing that the true merit of a profession is determined by the value of its services to society, the California Land Surveyors Association does hereby dedicate itself to the promotion and protection of the profession of land surveying as a social and economic influence vital to the welfare of society, community, and state."

"The purpose of this organization is to promote the common good and welfare of its members in their activities in the profession of land surveying, to promote and maintain the highest possible standards of professional ethics and practices, to promote professional uniformity, to promote public faith and dependence in the Land Surveyors and their work."

PERSONNEL

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CENTRAL OFFICE
P.O. Box 9098, Santa Rosa, CA 95405-9990

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ADVERTISING

Commercial advertising is accepted by The California Surveyor. Advertising rates and information can be obtained by contacting CLSA Central Office, P.O. Box 9098, Santa Rosa, CA 95405, (707) 578-6016, Fax (707) 578-4406. Circulation: 4,800.

SUSTAINING MEMBERSHIP

Membership in the California Land Surveyors Association, Inc. as a Sustaining Member is open to any individual, company, or corporation who, by their interest in the land surveying profession, is desirous of supporting the purposes and objectives of this Association. For information regarding Sustaining Membership, contact CLSA Central Office, P.O. Box 9098, Santa Rosa, CA 95405, (707) 578-6016, Fax (707) 578-4406.

EDITORIAL MATERIAL

All articles reports, letters, and contributions are accepted and will be considered for publication regardless of the author's affiliation with the California Land Surveyors Association, Inc. Contributions submitted on floppy diskette medium are encouraged. For compatibility, disks should be 5.25 or 3.5 inch, MSDOS (IBM compatible) format. We can accept ASCII text files or word processor files from the following programs: WordPerfect or Microsoft Word.

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DEADLINE DATES

Spring January 10, 1997 Summer April 10, 1997
Fall July 10, 1997 Winter October 10, 1997

Articles, reports, letters, etc., received after the above mentioned date will be considered for the next edition.

Opinions expressed by the editor or individual writers are not necessarily endorsed by the California Land Surveyors Association Officers or its Board of Directors. Original articles may be reprinted with due credit given to the source and written notification to the California Land Surveyors Association.

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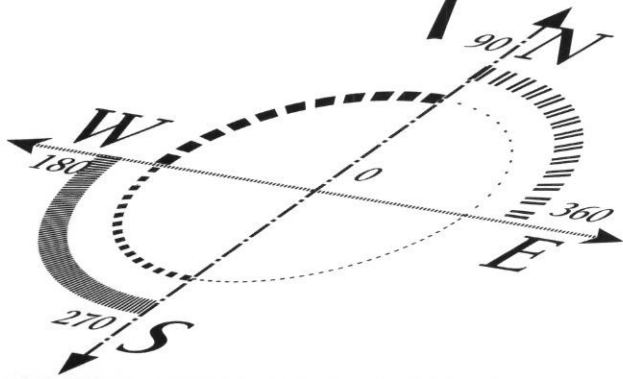
Trimble Navigation 2

On The Cover: *Surveying the Sandhills in 1904*

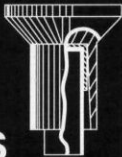
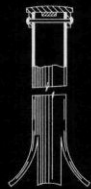
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From the Editor

Gump Mastin

by: *The Editor*

*My mama always said "Guilty is as Guilty does";
here take the damn chocolates' - Richard Simmons*

It has been a few years since I wrote an article on the process of editing this fine magazine. Ok, it's been a few years since I've written anything other than my name and most don't believe that's my name. So I thought I would write about the process as I have come to understand it. Now, you may want to look back at one of those first issues I edited and compare the process then with now. And, if you are really that anal, we've got the perfect job for you here at *The California Surveyor* and it need be done only four times a year!

First, you have to understand that *The California Surveyor* is put together on a strict schedule. No really, I have it here right in front of me. We have the deadline date for each phase of each article right here on this list. Let's see, its September, Friday the 13th, so I must be working on Issue . . . Whoa we'll put that away for right now.

OK the first deadline date is "Editor receives articles for issue". This is sort of a funny deadline because in all honesty I'll take an article any time I get it. I have never ever turned back an article because it was late. That is partly because we don't have an overabundance of articles or staff writers and partly because of that guilt thing we'll talk about in a bit. The way we normally get articles is someone has a good idea for an article, makes the effort to write it; (solely for self gratification if it comes here), they then send it to me and if I don't lose it, it gets published in the next available issue. I

have been very lucky in this regard in that I have gotten many good articles, letters and snippets from individuals, who although not professional writers do an excellent job of conveying their thoughts and ideas on paper. I have never turned down any article. Well, okay, I turned down one. I can't tell the story because that would not be ethical from a publishing perspective. Wait, I need to fill up this column, so here it goes. If I am talking about you, and I am certainly not, I apologize. I received an article for consideration about three years back. The article was actually a doctorate thesis done by a man or woman from Norway. It is impossible to guess the sex of a person from Norway based on their first name. It's impossible to print a Norwegian first name on a single piece of paper. Anyway, the thesis was translated into English by what I would assume was the only person the author could afford. Along with this thesis came a very nice cover letter, again translated into English. The cover letter was my first clue. I to this day, don't know if being called "Ed the hare" is a compliment or a derogatory term in Norwegian. I believe the idea of the cover letter was "please please have mercy and publish this thesis so I can tell my professors that I actually got it published and they will let me out of this hell hole". Let's face it, *The California Surveyor* is not the first place people from Norway go to publish scientific articles. Now the thesis was about 150 pages of typed gibberish. Lucky it had the universal trans-

lator of hand drawn sketches; (xeroxed from napkins would be my guess). I believe the thesis showed how the person had developed some way for space travel in a vehicle that looked a lot like a fine cuban cigar, half smoked, or, for some method of providing low cost housing using the plentiful harvest of Virginia and the Carolinas. I swear I am not making this up, if you would like to read the article yourself I can point you to our local recycling center.

The next deadline is the infamous "Editor submit material to Central Office". The idea behind this one is that the Central Office cannot put together a magazine without some material. Yeah, I don't get it either, but in any event they seem to think that I should select the material that goes into the magazine then send it to them by some specific date so the magazine will go out as scheduled.

To get an idea of how this works is to understand the synergism of procrastination and guilt. For those of you who weren't required to take the course "Mindless Theories Of Business" in college, synergy is "The whole is greater then the sum of the parts". Of course I may have gotten that wrong on the test. Anyway, what happens is the deadline hits, one more cell in my brain is sacrificed as I get a twinge that something is deadly wrong. I look at the calender - nothing. Another cell, another twinge; I figure it's time to clean up my desk and at the bottom of the pile is the last issue of *The California Surveyor*! Mild guilt attack, not too bad though as it's still the same week as the material is due. At this point I am now thinking "I can get it all done this weekend, late at night, no problem". Like most of you, my thoughts on a Saturday night around 11:00 p.m. are "I wish I had something mundane and tedious to do right now". So the week-

Continued on page 7

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F2:LAYOUT  
F3:MEMORY MGR. P
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PCODE :HUB  
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Y: 8° 01' 18"  
CON ON OFF
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01 18 30  
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end comes and goes. These days I don't have so many brain cells that I can spare many to any one guilt, so at least another week goes by.

Finally, I sit down with all the material I have gathered since that last issue, along with previous material I didn't use last time that I figure will miraculously be worthwhile now. In addition, I have papers on other C.L.S.A. stuff, calculations from some job that I had been looking for and a sandwich wrapper that smells like chicken salad. I do my first sort, or as we call it in the business "first sort". I trash everything that does not apply to surveying, or that had some deadline attached to it, which by now has long passed. Now my second sort I separate everything into groups. "Press release . . . Press release . . . Press release . . . possible letter . . . Press release . . . Press release . . . Press release . . . Possible article from last time . . . Press release . . . Press release". Oh yes how we love those press releases ("filler"). Then I actually start to read everything and be selective. Again, all ("almost all") articles specifically sent to me are used. However, there are other items that may or may not be of interest. I am guided in my selection of material based on the direction I was given when I took the job of editor; "Pleaseeee be editor, you don't really have to do anything, its all done for you" ("Sucker . . . You'll never get out of this hold"). So if I like it, or more importantly, if it's on disk I use it. Next I work on the cover. The cover is critical for every issue. It must draw the audience and convey the theme of the magazine as well as present the profession in the most positive light. So as always, I start looking for old photos lying around that in some way may pertain to surveying. If that fails, the Central Office Staff starts looking around for anything survey-like. If that fails we start thinking about the suc-

cess of the Beatles "White" album.

Now I've got all the stuff ready for the issue; except for the Officers and Editors columns. I need to call the President and get him to write a column. Of course I would feel guilty about calling before I have my own column done, so I'd better do mine first. I can do it late at night this weekend. Before I know it, its late night Saturday. I've got to write my column, but oops, I don't have a subject to write on, I'll think about it while I'm at work and then write it in the evening. Coming up with an idea for my columns is sort of an oxymoron. I come up with idea after idea and then when I sit down to write it up I have lost all my ideas. For example, this column is about the Olympics.

The most successful way I write these columns is by not writing anything. Although it doesn't take up much space, it is completed quickly. I have this guilt about not writing a column however. When people see me and fear that I am going to ask them for an article they quickly declare "Boy I sure do enjoy your column. I could never write that well" ("Sucker . . . You'll never get out from under this"). So I hold off on submitting all the material for *The California Surveyor* while I get out my column. By now I'm three weeks late and am feeling so guilty, that I really want to write the best column I've ever written. One that will bring tears to all that read it, rally the profession and be nominated for a Pulitzer. So I am going to have to think about it for a little longer to come up with that perfect column.

Now I'm four weeks late and have burned up so many brain cells I've almost forgotten that there is such a thing as *The California Surveyor*. However, I am reminded it exists by a series of messages from Central Office that I ignore, although I feel guilty about it. The intensity of the messages

being left builds until finally I am forced to respond. This is usually done by having a summons server track me down. I call, "Oh, is it that time already?"; "You should have called me earlier . . . you did?"; "those secretaries must be losing my messages again . . . Oh really.. at home?"; "I need to get a new answering machine, it keeps erasing the messages . . . No... my wife?"; "She's been seeing a doctor, she's in the pre-Alzheimer phase"; "Well what can I do for you?". Now I'm in high guilt mode and pure procrastination mode.

So the next phase is "Well, I can finish it up on Saturday, late at night." At this point we are starting to look at the ever-liberating "This might be a good time to skip an issue" theory of editing. Not much substance to it, but it has a lot of followers. The idea of the great column is out the window at this point and I am just trying to find that stack of material I sorted way back when. Guilt along with fear of returning the new batch of phone messages, is the driving force behind completion of the task at hand and the task at hand is just get it out the door and over to the FEDEX box just as fast as possible.

By this time I really don't care about the other deadlines on our schedule as I am still on "Editor receives articles for issue" deadline. So beyond these two deadlines I don't know what happens, except that one day in the mail I get *The California Surveyor* with a cover of some friends on it.

So, as in life, *The California Surveyor* is driven by a good dose of guilt with a healthy sprinkle of procrastination built in. It is my intent that this column is a general apology for the lack of this magazine coming out in a timely manner for the last year ("Maybe a corny column will make them forget how late they got this issue"). Oh, those chocolates are good! ♦

Letters to the Editor

■ IN MEMORY

On June 19, 1996, the Northern Counties Chapter dedicated a crepe myrtle tree in honor of the late Mrs. Jean Lippincott near the children's playground at Bille Park in Paradise, California. The informal dedication by the chapter was attended by several friends and family. Mrs. Lippincott participated in the family surveying business along with her husband Thiel E. Lippincott and their son, Gary, in Paradise for over twenty years until their retirement in the mid 80's. Thiel was a corporate member of CLSA and has served as president of the Northern Counties Chapter. Jean and Thiel were both loyal supporters of CLSA and have contributed greatly to the chapter over the years.



From Left to Right: Robert Grimm, P.L.S. - current Northern Counties Chapter representative also Board Member of Paradise Recreation and Park District; Thiel E. Lippincott, P.L.S. - husband of Mrs. Lippincott; Jim Herrick - current president of Northern Counties Chapter; Gary E. Lippincott, son of Mrs. Lippincott.

Picture was taken at the dedication next to the children's playground at Bille Park in Paradise, California.

■ PROFESSIONAL ENGINEER'S BOARD SELECTS NEW EXECUTIVE OFFICER

Ted Fairfield, President of the Board of Registration for Professional Engineers and Land Surveyors, today announced the appointment of Cindi Christenson as the Board's new Executive Officer. The Executive Officer oversees a staff of 40 and administers an annual budget of over \$6 million.

Ms. Christenson, a registered mechanical engineer, has served the Board as Interim Executive Officer since December, 1995. For seven years prior to assuming this position Ms. Christenson worked as a Senior Engineering Registrar at the Board. In this capacity she was responsible for the management of the examinations unit, review of enforcement cases and drafting regulatory files.

"Ms. Christenson's selection from among 900 applicants demonstrates the Board's confidence in her abilities," said Mr. Fairfield. "Her comprehensive knowledge will serve the Board well during the Joint Legislative Sunset Review Committee hearings this fall and in the Board's proposed rewrite of the Professional Engineers Act which should be introduced in the 1997 Legislative session," he added.

■ ON THE COVER

Your summer issue No. 112 arrived with George Washington on the cover. I just happen to have a postcard (in color) of the identical reproduction shown by *California Surveyor*.

My postcard was postmarked February 22, 11 a.m., (year not legible),

DeLanso (probably New York State). The postcard was written to someone in Schenectady, New York. A 1¢ Benjamin Franklin stamp is pasted on the card. I agree with your 1909 date as shown in the postcard. The cherries are red; leaves are green; hatchet head is silver; George's hat is black; his hair is gray; his lips are red; the level is yellow; and the flags are red, white and blue. I framed my postcard to preserve and show it off.

Since I am a history buff, particularly of George Washington and Thomas Jefferson, their pictures hang in my office.

I am curious if your reproduction was taken from a postcard or some other source.

Rollin C. Curd, RLS 109

Editor's note: The California Surveyor Production staff responded to Mr. Curd.

■ 1995 - 96 TRIG-STAR

Trig-Star 1995-'96 was a huge success thanks in most part to California Land Surveyors Association. The State prize of \$1,000 and a plaque were presented to California Trig-Star 1996 Chris Famini of Montgomery High School, Santa Rosa California on June 18, 1996.

Chris successfully won his high school competition in May and went on to compete and win the State Competition. He has gone on to graduate this year with thoughts of continuing his education at Fresno State University. He hasn't decided if surveying will be his major yet.

I would like to thank all the area participants for their dedication in making this year the most successful ever. Special thanks to Randy Woodjack of the Central Coast Chapter, Adrian Oskam of the San Joaquin Chapter and Jim Kuhns of the San Diego Chapter for their extra effort and commitment.

I am inviting any interested people who would like to get involved with Trig-Star next year to contact Larry Doss, Doss Constructive Ideas, Inc., P.O. Box 22626, Knoxville, TN. 37919 for further information. I will be stepping down as State Director this year.

Pete Jackson
National Trig-Star Committee
Area 9-10 Chairperson

■ PROFESSIONALISM

Let me preface this letter by stating that I am a PROFESSIONAL Land Surveyor. This is true because throughout my career as a Surveyor, I have always belonged to, and supported my Professional Societies, at the National, State and Local levels, I have always conducted my business and professional actions within a code of ethics, as prescribed by these organizations, and have always attempted to act in a manner that would bring credit to my profession. In a word, I am proud of what I am!

I am unaware (other than by the writings of others) of conditions in the rest of the country, but for myself, I have always charged for my professional services by the hour, just as the Attorneys do, except for those collecting on contingency for accidents. I have always felt that if I charge a flat fee, or a percentage of the value (like a Real Estate salesman), sooner or later I will be faced with the choice of:

- (a) working for nothing or
- (b) cheating my client.

Since I have never been endowed as a charitable institution, nor am I a crook or

a cheat, neither of these alternatives is practical. I always attempt to keep my clients up to date and inform them of unusual circumstances if and when they occur, but a proper survey that will stand up to litigation and/or will be the basis for clear title is the name of the game and this type of work cannot be short-cutted.

I am sure the following opinion will draw fire, but land surveying (boundary determination) is an art and not a science, although it does employ some scientific principles in the successful pursuit of knowledge as to just where the Surveyor's opinion of the boundary location may be.

Please note that I stated "opinion". The Surveyor does NOT determine where boundaries are. This is the sole prerogative of the Courts. The Surveyor's role in the event of a dispute is to first attempt to settle it amicably between disputants, this failing his role is to attempt to lead the Judge to a proper decision by clear, incisive testimony, and unimpeachable evidence. Every time we mark a boundary location we are letting the world know that this is our opinion of where things should

be. If we are wrong we are guilty of exercising faulty judgment that may cause damage to one or more parties, much like a drunk driving a car, or someone behaving in a reckless manner. People who do this bring discredit to the profession and do not remain in business long.

What started out as a short comment on "professionalism" has ended up as a long windy dissertation by an old man on a subject that is dear to my heart, i.e.: Land Surveying. Needless to say I am extremely opinionated on the subject, and am distressed that so few of our members belong to and support their professional organizations and many when they do show up think it fashionable to look as though they just completed digging a ditch, or cleaning the stable. Gentlemen, if we, as a profession, wish to be considered as professionals, it is high time we commenced to act like professionals and expect to be paid commensurably.

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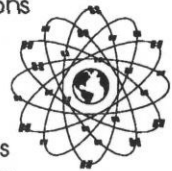
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Treasurer's Column

by: *Steven C. Wilson, PLS*

With over one-half of my busy term as 1996 Treasurer over, I was looking forward to being Secretary next year. I perceived the Secretary's job as not too demanding since almost all of the functions such as minutes, agendas, etc. are handled very well and professionally by the Central Office. It appears that next year will be my turn as the President-Elect. The President-Elect's tasks between the ordinary Board of Directors and Executive Committee meetings are somewhat more demanding, since he/she historically visits as many chapters as possible in order to become more acquainted with the membership of

CLSA. This exposure to various chapters provides a means of communication with the individual members, a means of furthering the experience of the prospective CLSA President, and enhances communication and speaking skills. I am looking forward to meeting as many members as possible.

Everyone who is active on the Board of Directors of CLSA knows that I have personally taken over the financial reporting for the Association this year. My goal was to set up a structure for accounting and financial reporting that would be used in future years. During the recent years, the Treasurer's reports have been getting somewhat better, however, I believed there was still a significant need for improve-

ment. The new accounting system is now operational after a significant, (and somewhat un-anticipated), learning curve. I am looking forward to the realization of my goal as my contribution to CLSA.

I am pleased to report that CLSA is financially sound. During the recent past membership numbers have been slightly declining, so we have "tightened the belt" to remain financially sound. We have set a budget for this year that will provide a level of spending that is less than our ordinary revenues. We also had a very successful conference in South Lake Tahoe last March, which has contributed to our financial stability.

With some operational funds available we can implement the provisions of the Strategic Plan which calls for the efficient use of resources for the continuing development of programs which effectively address the needs of the surveying profession. These are precisely the tasks that I envision comprises the duty of the Elected Officers and Board of Directors of CLSA. One of these goals is to make membership in CLSA more valuable for the members, which in turn would have beneficial effects on membership and rev-

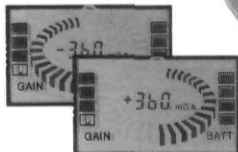
Continued on page 11

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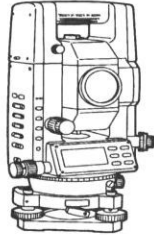
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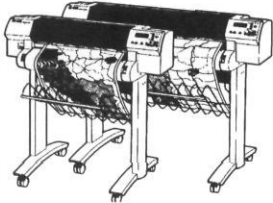
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MOTOROLA

Continued from page 10

enues. CLSA should do everything possible to provide quality educational seminars and conferences that would enhance the image of the Land Surveyor and the value of our organization. Planning for the next conference to be held jointly with WESTFED in Las Vegas, Nevada, is underway.

The surveying profession is evolving very rapidly. At the last Board of Directors meeting, we voted to have a CLSA Home page created on the Internet. It was not too long ago that no one knew what the Internet was, since it did not exist. The legislature and Board of Registration is continually active. The possible sunset of our Board of Registration is being taken very seriously. The P.E. Act re-write is again underway. A re-write of the Land Surveyor's Act will in all certainty follow. The testing process for future Land Surveyors is being studied. We will probably find ourselves taking the NCEE examination with a state-specific test in addition, similar to the process now existing with the Civil Engineers. A measure sponsored by PECG will likely be before the voters in June 1998 that could drastically change future work in the private and public sectors.

While trying to sort out my thoughts for this short article, I was getting a mental image of a poster of a chimpanzee with one hand on his head, as if in despair, bearing the caption that went something like, "Anyone who can remain calm in times like this does not understand the situation." Our organization is blessed with some highly motivated and qualified Professional Land Surveyors, who contribute to their profession and to CLSA. I am proud to be a member of CLSA. I look forward to every Professional Land Surveyor supporting CLSA via membership. ♦

DID YOU KNOW THAT...

An early measure of area was based upon the amount of seed necessary to plant a given piece of land. Later the unit of land measure became the amount which could be plowed by a man with a yoke of oxen in one day. A furrow long (furlong) was the distance the oxen could plow before they were stopped to "blow". This distance was taken as forty lengths of the pole or god used in driving the oxen, and was eventually standardized as one eighth mile. The length of the ox goad was taken as sixteen and one half feet and became known as the pole, perch, or rod. The width of a strip of land which was legalized in England by the statutes of King Edward I as an acre. The designation doubtless came from the Anglo-Saxon acer, a plowed or seeded field. It will be noted that the acre by these definitions contains 160 square rods or 43,560 square feet. This is the relationship in use in the United States today.

Excerpted from Surveying: An Introduction to Engineering Measurements. Prentice-Hall, Inc., Englewood Cliffs, N.J. (1956)

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Comments on Surveying Ownership Boundaries

by: *Wayne L. Hanson*

Territorial imperative has been the instinct of animals and man for thousands of years. We have all seen animals, including our pet cats, spray walls, trees or whatever to outline their territory. And man's idea of ownership goes back to the ancient Egyptian culture where monuments were set on the hills around the Nile Valley to define the farm boundaries. These monuments were immune from the Nile River floods and were used to restore farm boundaries after the yearly flood of the Nile River. In fact, the penalty for tampering with or moving one of the monuments was death.

So it should come as no surprise that modern man finds the limits of his land ownership very important. Enter the Land Surveyor, professional who adjudicates boundaries of land ownership.

The purpose of this paper is to reveal the roll that the Land Surveyor plays in the urban areas of Southern California.

There are individual parcels of land in Southern California that number in the millions. These parcels were created by subdivisions of larger holdings and they date from the mid-nineteenth century to the present. This paper will be concerned with the establishment of title lines in Southern California in the urban locals and will not cover rural or farm holdings.

Many parcels in the Los Angeles area are within rectangular blocks surrounded by four streets. Establishment of title lines under these conditions usually consists of a simple traverse of the

four-sided block to third order accuracy. Of course, no block actually measures what it is supposed to and in most cases the excess or shortage is prorated or divided up among the holdings. Of course, there are exceptions to this common method when the discrepancies become significant. A study of the holdings in a block should be made tying in all survey monuments found in the block and the location of fences, buildings near title lines, walls and anything that may prove possession. Keeping in mind the Rights of Adverse Possession, especially the age of the holdings, is a position that any competent Land Surveyor must take into account. In addition, mutual agreements often can be worked out between adjoining owners and the title line monumented where they agree. New deeds must be drawn up, run through a title company and a Record of Survey filed complying with State and Local laws.

In the odd blocks, curving streets and title lines, hillsides, water boundaries, much more needs to be done. Careful study of the grant deed, subdivision maps and many other factors must be made. Of great importance are the grant deeds. When a deed says 50 feet, it means 50 feet, not something else. Also, the north, east, south or west call must be carefully interpreted in its relation to the direction of the title lines. At 45 degrees off cardinal, the N,E,S or W calls can be a problem. Working closely with the title companies and adjoining owners is really a help in these situations. There are very few times where an urban retracement survey is

impossible and new deeds, a new subdivision, or lot line adjustment must be filed. Never, never establish a property line unless you are sure it will hold up in the eyes of the public agencies and the courts.

The other common type of land survey in the Los Angeles area is the ALTA. The American Land Title Association Survey (invented in 1922 by R. D. Klise, LS1289, and the old Title Guarantee in the Los Angeles area). It used to be known as the ATA, but a lawsuit by the American Trucking Association made the title companies add the letter L for Land.

These surveys are primarily for financial purposes with the lender demanding Title Insurance which guarantees no encroachment problems with the boundaries. Of course, the title companies are not about to insure a title line that has encroachments, so, depending on the liability, they may demand a "Survey of Fact" and upon receiving same, write exceptions to their policy. The lenders, of course, also get involved. This puts a lot of responsibility on the back of the Land Surveyor.

It is essential that a Land Surveyor honor original monuments. When these monuments are found and are proven to be original subdivision points set by the original Surveyor and are more than five years old, and have not been disturbed, they must be honored. Generally they must be considered correct regardless of subsequent measurements. The key is to prove that the monument is original and undisturbed. And now a few comments regarding a few cities and their centerline establishment histories:

Of course the City of Los Angeles comes to mind immediately. LA began establishing and tying out centerlines in the late Nineteenth Century. In fact, they had a reference book for survey work field books made before 1909. This book used to be available at the vault on the 6th floor of LA City Hall. Who knows where it is now.

Nevertheless, LA C.E. ties are excellent.

The City of Santa Monica has an interesting history of its centerline process. All through the '40s and '50s, if you surveyed the City, you established street center lines by splitting the curbs. A member of the City Council, who also was a local Surveyor in possession of a pioneer's field notes assured the Council that there was no need to spend City money setting street center lines. This, of course, gave that individual a monopoly of surveying in the City to the detriment of the average citizen. In the early '60s, a spirited new City Engineer began establishing center lines and tying them out regardless of the City Council's lack of appropriating funds. The results are that the City of Santa Monica now has some of the best street control monuments in Southern California.

The City of Pasadena has developed excellent street ties. However, the original San Pasqual Tract, which was laid out around the turn of the century as orchard lots, has been re-subdivided many times. The result is that Pasadena also has an interesting surveying heritage. A Surveyor may traverse a block but find the rear north-south property lines makes no position sense. That is, until you study the original turn of the century Tract and find that the north-south title lines fit the exact record distance on the San Pasqual Tract from a street three blocks west; the famous Allen Brothers notes are now located at the Pasadena Historical Society facilities.

Last, the City of Beverly Hills is quite interesting. The town includes some of the most valuable land in Southern California in the area north of Santa Monica Boulevard and south of Sunset Boulevard where the north-south streets are on long radius curves. It is important to know that the original Surveyor established front and rear corners for each lot with 2 x 2 stakes. These were sometimes buried and can be found today, sometimes, in the rear alleys where the pavement ends one foot from the right-of-way lines. Also, in order to avoid setting up survey instruments on each front corner so that reference monuments were on the lines produced, the survey-engineer set two-foot swing ties on most of the blocks. The exception was a few blocks just north of the center of town.

In addition, many woven wire fences with green metal posts were built to fit the original 2 x 2 monuments. Even today, some of

these old fences exist. Centerline monuments also exist, but it is important to know that surveys based on them may not fit the swing ties mentioned above. Green woven wire fences, two foot arcs and buried 2 x 2 must prevail.

Finally, many cities and communities make up Southern California, and each has its own history of methods for title line retracement surveys. It is wise to research at the local City or County engineering offices and under certain circumstances, contact local Surveyors to help establish title lines in these communities.

In conclusion, if it is essential to use the modern methods of surveying; Then EDM, GPS, computers and other tools that are now available to the modern land surveyor must be mastered. But it is also important for all surveyors who work at retracing title lines to realize that research, precedent, possession, common sense and the mastery of the up-to-date art of surveying are essential to being a competent land surveyor. And remember, in the final analysis, the courts of law have the final say as to the positioning of title lines. But do not underestimate the value of the testimony of highly trained and competent Land Surveyors for they are really the key.

[Editors Note: This paper was written by Mr. Hanson for the Los Angeles Chapter of CLSA. We ask for other chapters to provide articles from their regional experts for inclusion in the California Surveyor] ♦

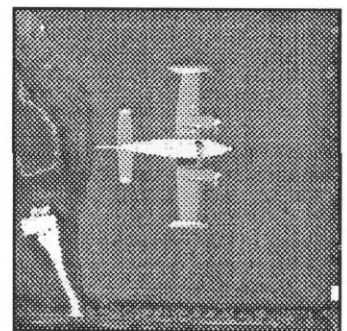
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Surveying the Internet

by: Stan Tommi

I'm sure all of you, if you haven't lived in a cave for the last 3 years or your cave had E-mail capabilities, have heard of the term "Surfing the Net". Here we go again, some other profession stepping on our turf. Those damn surfers!

It is a fact that of the 8.5 million users of the internet system only 27,540 of them or 0.32% can actually surf on the internet. Whereas 63,930 (0.75%) actually survey the net on a regular basis. The remaining 98.93% are just wandering aimlessly, not willing to stop at the gas station and ask for directions.

Well if you are one of those 98.93% or one of the remaining 1.8 billion who have not tried the internet on their own and are interested in surveying, then this article is for you. In this article we are going to look at some of the interesting sites on the internet that pertain to surveying and California. Currently the California Land Surveyors Association is establishing a Web Page of their own, however it is not running at this time. First a few definitions:

Internet:	Cool sounding name.
Address:	What you need to know.
Anything else:	Doesn't really matter.

Before you get started there are a few basic rules:

First, you must have or have access to a computer with a modem that is connected to a telephone line. This is important. A computer with no modem next to a phone doesn't work. A computer with a modem not hooked up

to a telephone line doesn't work. A telephone by itself doesn't work.

Second you must have some way to access the internet or "on-line". Options include a connection to a internet server and a program such as Netscape, America Online or CompuServe. You will know if you have this right, if you are getting a bill every month from something that looks like a computer service. In this article when I talk about "Seeing graphics" I am assuming that you have a service and program that will allow the graphics to be displayed. If you don't have graphics capabilities, you can still survey the internet and enjoy doing it.

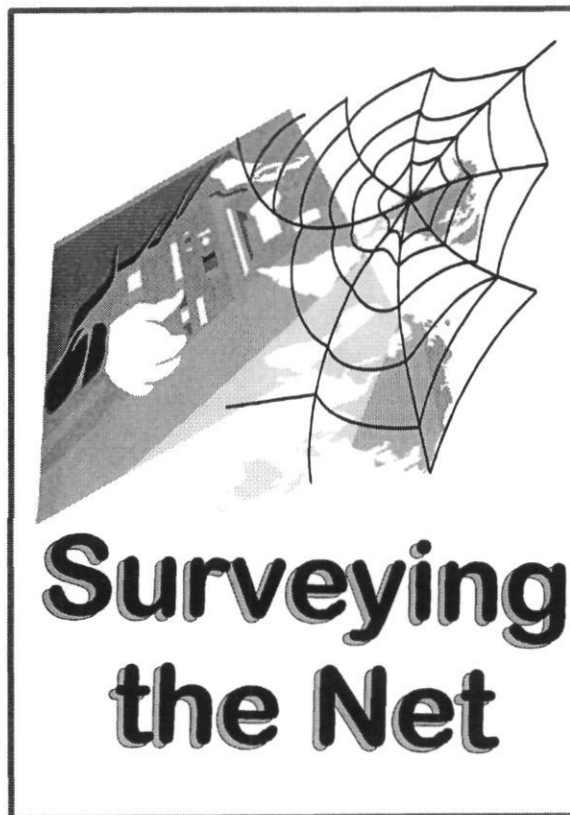
Address - remember this from the definitions - This

will either be given to you, or you will be able to make up your own when you get on-line. This is how someone can send you electronic mail (e-mail) and how you are known on whatever service you chose. In addition, you will need a password. The Password is not your address and you do not want to keep listing it on all your e-mail. Now keep this distinction clear. An address is something that might be clever like "svy4food", "gpsrus", "cnkNmail" or better yet like your name "FrnkNStein", "Jsmith100", "SueJones" whereas a password should be confusing and not easy to figure like "L23e4TO", "Q0urt89p" something like that. Again, don't mix them up.

And most importantly, you must know how to use the program and service that you have

selected. Services like America Online has much more than the internet, so if you are going to use the internet you have to know how to get there. On America Online, you click on the word "internet" to get there. See, not rocket science stuff.

Once you are ready to survey the internet, I've always found that it is best to have an address to go to first. When you are starting, it is best that the address goes to what is called a web page. A web page is just something that will show you text and graphics. An important hint: You don't really have to care what the heck is going on between your computer and these web pages



except to know that what you are looking at is not on your computer; it's just being displayed on your computer.

If you have your address, then just type it in and hit the ENTER key to send it. Then one of three things will happen. First and hopefully most often is some text and graphics will come onto your screen. However you may get a message that it can't find the page (check your spelling, spacing and text case) or it can't hook up to it (that means your service is having some problem) or finally you may have your computer lock up. People breathe, it rains in Seattle and computers lock up. You can't stop it, most often it was nothing you did, so don't worry about it; just start the computer and hook up onto the internet again.

Once you get to one of these web pages you need to know how they work, again not rocket science stuff. The nice thing about web pages are that they can send you to other web pages. If you see text in a different color (usually blue) that means you can click on it to go to either a web page or something else that the text is talking about. If you see text in a different color, that means that you have already gone to that place (figuratively). Another helpful hint: Just because you have gone there once doesn't mean you can go back there. Also, if you see a graphic about some-

thing you may be able to click on the graphic to go to something more on the graphic.

Besides Web pages, you can actually download files containing text or graphics from web pages, assuming that the web pages has files to be sent. You can also usually send an e-mail to the person or persons that create and update the web pages.

Just so you have some interest in trying this internet thing out, here are some addresses to try.

<http://www.ca.gov>

State of California's Web page

When you load this, the first thing you will see is a license plate graphics. So naturally you will want to click on it to see what happens. Nothing happens. That was the only thing I didn't like about this web page, most of the graphics didn't do anything; hardly the kiss of death for a web page. You can get to most all the other state web pages from here. You can find out about your assembly members with pictures of them. You can e-mail them or even the gov. You can see where the California Budget goes to when we have a budget and you can find out about vacation spots in California.

<http://www.sen.ca.gov>

California Senates Web page

You can get to this from the previous web page but if you want here is

how to get there directly. Nothing exciting but pure information.

<http://www.usa.net/~dvdbaker/survey.html>

David Baker's Survey Page

This is the mother of all private surveying web pages. You would think David Baker lives in California with all the free time he must have, but he doesn't. This is a fun web page to look through that actually pertains to surveying and surveying interest. You can reach just about any other surveying web page from here as well as all sorts of other places. A must see.

<http://www.ibmpcug.co.uk/~hydro/ussd.html>

US Survey Database

This is a compendium of US agencies that do surveying and GIS with links to all their web pages as well as regional agencies. It will get you to BLM, NGS and USGS without much effort.

<http://homepage.interaccess.com/~maynard/Land Surveying and Geomatics>

This is another fun web page maintained by Maynard H. Riley PLS. It has links to all sorts of stuff as well as definitions and all sorts of other stuff. For pure surveying links, this is one of the best of the ones I have seen.

These are just a few addresses that will get you going on the internet. All of these sites can be very helpful in finding specific information. From all of these, you can explore all sorts of other areas on the internet. If you want to look for other topics on the internet, you need to use some sort of search engine, usually called a "gopher". Now, how many gophers do you know that surf? But I bet you've seen a lot of gophers while surveying. See.

Good luck with your journey. Live long and prosper. If you have questions, you can e-mail me at dont.call.us.well.call.u

[Editor's Note: This article was prepared for the Central Coast Chapter of C.L.S.A. for inclusion in "The California Surveyor".]

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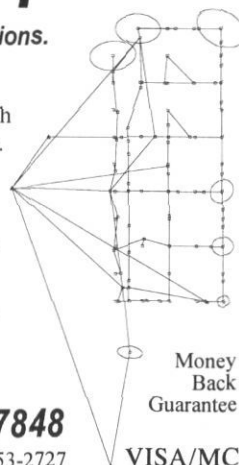
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Private Land Claims

by: **Crisostomo N. Perez**

The following article is from Cris Perez on Private Land Claims in California. Mr. Perez is a boundary determination officer with the California State Lands Commission where his work for the past two decades has involved land title and boundary determination. Mr. Perez is author of "Land Grants in Alta California" a detailed reference of Rancho title information available from Landmark Enterprises

Private Land Claims are a class of land in the United States, having their origin from governments preceding the United States in sovereignty. The history of private land claims in the U.S. dates back to 1793 to the Definitive Treaty with Great Britain. From then until the Gadsden Purchase in 1853, many private land claims were contested against the United States. In order to validate these claims, Acts Of Congress, dating from 1805, established Boards of Land Commissioners. The main function of these Boards was to protect any valid claim and the guarding against confirmation of fraudulent or unfounded claims.

In California, the private claims arose from the signing of the Treaty of Guadalupe Hidalgo, between the U.S. and Mexico. The Treaty stated that, property of every kind now

belonging to Mexicans would be respected and that they would enjoy them as if the property belonged to citizens of the United States.

The term, "Mexican" encompassed more than people of Mexican descent. By Mexican law, anyone who became a Catholic and a Citizen of Mexico was accorded the title of Mexican. Prior to California statehood, many foreigners of British, German, Irish and other ethnic groups became Mexicans in order to acquire land from Mexico.

The United States Congress on March 3, 1851 established, "An Act to Ascertain and Settle Private Land Claims in the State of California" (U.S. Statutes at Large, Volume 9. Page 631). This Act established the Board of Land Commissioners to hear the claims in California. The Commission was authorized to issue subpoenas,

Continued on page 17

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administer oaths, take testimony and to decide as to the validity of claims, and therein be governed by the Treaty of Guadalupe Hidalgo. Appeal by the claimant and/or the District Attorney, was authorized to the United States District Court, with further appeal to the United States Supreme Court.

Again, the main function of the Board was to protect any valid claim and the guarding against confirmation of fraudulent or unfounded claims. Claims were rejected for many reasons, some of which were lack of proof, non occupation and failure to produce any proof of a grant from the Mexican Republic. However, the most famous of the fraudulent claims is the two grants asked for by Jose Y. Limantour of lands in San Francisco County and of three islands in San Francisco Bay. The Board initially confirmed both grants, however the District Court had the following to say about them. "It is no slight satisfaction to feel that the evidence has been such as to leave nothing to inference, suspicion or conjecture, but that the proofs of fraud are as conclusive and irresistible as the attempted fraud itself has been flagrant and audacious". This case was not appealed to the United States Supreme Court.

The procedures in the act placed the burden of proof on the persons seeking confirmation of the land titles. The Board heard 809 cases, confirmed 604 and rejected 190. The other 15 were withdrawn. Of these 809 cases, only 3 were not appealed to the District Court, thus being the only ones actually confirmed by the Board. Appeal from the decision of the Board was allowed, to the District Court. Of the 604 appealed to the District Court, 582 were confirmed and the rest rejected. Of these 582, 490 were appealed to the United States Supreme Court, and they refused to hear (dismissed) 280 cases.

Lands claimed, but rejected or claimed and confirmed but not presented within two years from the date

of the Act, were to be considered public lands of the United States.

Prior to final confirmation, the claimant of an unconfirmed land grant was entitled to a preliminary survey once a deposit to cover the projected cost of the survey was deposited with the Surveyor General. After the Act of July 31, 1876, the payment of the costs of survey and platting was required in all cases, not just for preliminary surveys, since the Government required payment for costs prior to the

" ... proofs of fraud are as conclusive and irresistible as the attempted fraud itself has been flagrant and audacious."

issuing of a final patent.

Once the Private Land claim was finally confirmed, a patent was to issue, which could not happen until a final approved field survey, made by the Surveyor General, had been completed. This in itself sounded simple, however the reality is a little more complicated. Once the survey was asked for and completed, more problems could arise. Anyone having an objection to the survey could object to the survey. These objections were not required to be made under oath, but merely by written objection, showing the interest of the objector and signed by him or his attorney, as provided in the Act of July 1, 1864.

Once a claim was finally confirmed by the United States, the U. S. Could not be sued by anyone else claiming title to that land grant. If a controversy existed as to the legal owner of the grant, or to the location of the surveyed lines, this would be a problem between the patentee and whomever had an adverse claim and if need be, to be settled in court, with-

out the United States being involved. Once all problems, if any, with the survey had been resolved, a final patent could issue to the patentee.

As recently as 1993, I received an inquiry from the United States, Department of State. They wanted to know what their recourse was concerning an inquiry from Puerto Rico. A family had inherited some papers from a relative and among them was an old deed to a portion of a granted private land claim. The question was, "Could they sue the United States, because they patented the land"? The answer is no, because the final decision by the Board of Land Commissioners, The District Court and/or the United States Supreme Court are conclusive between the United States and claimants only and shall not affect the claims of third parties. Whether at this late stage they had any rights against anyone else is questionable.

In 1859, Judge Ogdon Hoffman of the United States District Court, while presiding on the confirmation of Private Land claims, requested from the U. S. Surveyor General of California the procedures for the surveying of the private land claims. On September 2, 1859, J. W. Mandeville, the U.S. Surveyor General of California, forwarded to Judge Hoffman a list of Instructions from the General Land Office which would govern his actions in surveying the private land claims in California.

Following is an abstract of these Instructions:

A patent shall issue to the claimant upon his presenting to the General Land Office a certificate of confirmation and a plat of survey certified and approved by the Surveyor General of California.

2. The Surveyor General shall cause all private land claims finally confirmed to be accurately surveyed and to furnish plats of the same.

3. In the survey, the decree of

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Continued from page 17

confirmation must govern and where the terms of the decree are specific, they must be exactly observed on fixing the locality of and surveying the claim.

4. Where the record and the decree of final confirmation fix the area claimed and the map delineating the limits gives a surface larger than the area confirmed, the location is to be taken within that surface in a compact form, according to the lines of the Public Surveys, at the election of the confirmee as to the precise locality, but in such a manner, whenever practicable, as to not interfere with any adverse claim. Where this is not practicable consistently with the calls of the confirmation, the law is explicit as to the proceedings for the settlement of the conflict.

5. In any case such as the proceeding, confirmee must be formally requested by the Surveyor General to

give in writing a specific designation of the locality he may elect within the extended limits indicated by the plat in the record. A period should be fixed within which confirmee should be required to make his election. In default of compliance, Surveyor General shall fix the location, having due regard to the rights of the confirmee, and in conformity to the record.

6. When a grant contains the words poco mas o menos (a little more or less) the meaning is plain that the Surveyor General is to be governed by the area confirmed, but if in running out the lines of the confirmed claim, there is a little more or less than the fixed quantity, it is to be considered as not in any manner affecting the validity of the survey.

7. If the claimants paper's or the decision of the Board of Private Land Claim Commissioners show to the satisfaction of the Surveyor General that the claim ought rightfully to be located

as to cover in its area none but firm land, the surveying of swamp or overflowed land shall be omitted although such claim may call to bind on the water. The excluded swamp or overflowed land to be a matter for the claimant and the State of California to adjust.

8. Where the evidence is unmistakable from the calls of survey, or other papers, that a portion of swamp or overflowed land was designed to be included within the area of the claim, the Surveyor General shall direct the survey of it, according to such evidence.

9. In reference to point #4: Where persons have purchased lands from the holders of the grants and made settlements in good faith, the Surveyor General shall treat such sales and the settlement there under, as evidence of the election to that extent of the location of the finally confirmed claim, tak-

Continued on page 20

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As previously stated, General Instructions were only a guide to the accomplishment of the task of surveying the Private Land Claims. Usually, when the Surveyor General appointed a Deputy Surveyor to survey a Private Land Claim, he issued to him Special Instructions for the procedures to be used. Following are the Special Instructions issued to A. W. Von Schmidt, for the surveying of the "Los Mariposas."

Surveyor Generals Office
San Francisco, Cal. March 31, 1852

Surveyor General's Instructions to
A. W. Von Schmidt
U.S. Deputy Surveyor

Sir,

You are hereby appointed a Deputy Surveyor of the United States for this State as far as may be necessary to enable you to execute a survey of the tract known as the "Los Mariposas," to the extent of ten sitios de ganada mayor within the limits of the "Sierra Nevada and the rivers called the Chowchillas, the Merced and the San Joaquin," and which you will perceive by the enclosed copy of the order of survey made by the Board of Land Commissioners on the 28th January 1852, they required to be made by, "treating the said quantity of ten sitios according to the claim of the said Fremont and reference to the sketch in plan annexed to this petition, but in such manner as to confine said location within the said limits, and to include in the survey so to be made the same quantity of ten sitios."

Enclosed you have a copy of the Map, a sketch signed by Alvarado thus referred to us as being annexed to the petition, and in the absence of more precise directions from the Commissioners, you will have to make the survey in conformity to the wishes of the claimant, controlled however and governed by the Alvarado Map. Should the claimant desire any other lines to be run as the boundaries of the claim, than those which upon a personal examination of the Country you should consider as being those intended by the Alvarado Map, you are at liberty to run them, in addition to those you consider the intended boundaries. The reasons for your assuming any lines or corners as the true ones of the claim, whether derived from an inspection of the ground, or the testimony which may be offered you, should be stated in your field book.

Should you be appraised of there being any interfering claim or title based upon any alleged Spanish or Mexican grant, you will notify the owner thereof (in writing) or the parties in possession of the line, when you propose executing the work, so that they may be present at the running of the lines, if they should so desire; and if they object to any line or corner, you will keep full notes of the reasons and character of the objections and the names and residences of such persons as either party may believe to be able to give important evidence; and you will also carefully preserve and return any papers, etc., which may be given you, bearing upon the subject. If any line or corner is agreed upon, it must be so entered in your field book, with the names of the consenting parties, etc.

You will be careful in making personal observations as to the variations of the needles and as a check upon the accuracy of your courses and distances, it would be very advisable for you to survey some of your corners with each other or with some prominent natural object, by a series of accurately observed angles, all the particulars in relation thereto, to be entered in your field book. After making the survey of the lines, you may deem the intended boundaries of the claim, you will proceed to ascertain the area embraced thereby and should you find it to exceed that of ten sitios, you will curtail the survey to that area, by running such line or lines as may be necessary for that purpose.

You should erect mounds or posts at your corners, or else identify them in such a way, that it may be easy at any time, from your notes, to ascertain their position with certainty and without difficulty. Your survey must be made in chains and or links, in relation to the Commissioners chain, in this office and b the true meridian and the topography of the country is to be fully noted in your field book, and wherever plans or diagrams will elucidate any point, they should be made in your field book.

Your field book, when returned, will have to be accompanied by an accurate map, showing all the lines run by you, on a suitable scale and exhibiting the topography of the country. Before entering upon the survey, you and your men will have to be qualified in the manner prescribed when executing public work, and your field book will have to be verified by yourself and them, in the manner directed in the general instructions.

Your report in relation to the execution of the survey should be full and minute and such as will afford all the information possible, going on to explain the reasons for adopting and running the lines, and thus make the Land Commissioners and this office, acquainted with all the facts, connected therewith, which you may be able to ascertain during the execution of the work.

As you have made an agreement with the parties interested in relation to your compensation for making the survey etc., nothing is required to be said by me upon this subject, except that under no circumstances whatever, is this office to be made in any manner responsible for any expenses growing out of the same.

Very Respectfully
Your Obedient Servant
Samuel D. Kina

ing care to conform, respecting the whole location of such claim, to the other requirements under point #4.

10. Where confirmed claims conflict, the Surveyor General shall have the power as the Register of the Land Office and receiver of public moneys had by virtue of the 6th Section of the Act of 3rd of March 1831, namely to decide between the parties, in such a manner as may be consistent with justice. It shall be the duty of the Surveyor General to have those claims surveyed and platted in accordance with such decision.

11. The Surveyor General shall, before proceeding to field operations, make a call, in writing, upon the several claimants where confirmed claims conflict, to file with him an authentic showing of the "conditional lines or boundaries" which may have been or may be agreed upon between them. A period affording a reasonable time shall be fixed for a reply. In case of default the Surveyor General shall decide between the parties consistent with the principles of justice, and shall cause a return of survey to be made exhibiting in black ink on the plat the exact limits according to the decree of final confirmation, and in default of such conditional lines, those lines adjudged by the Surveyor General to be those of the survey of the tract, which shall be carried into patent.

12. In any case where a survey under a decree of final confirmation shall fall wholly within the limits of another, the grade of title, and date of confirmation, will be the essential data in determining as to which will take precedence. In any such case, the Surveyor General should make a full report to the General Land Office of all the facts, with illustrative diagrams, and the decision made, notifying the claimants of its purport and then await the ultimate decision of the Department of the Interior.

Along with Special Instructions from the Surveyor General, the Deci-

sions of The Department of the Interior and General Land Office in Cases Relating to the Public Lands, from 1882 to 1928, also have instructions for surveying various private land claims.

Rio de Los Americanos

In June 1844 William Leidesdorff became a Mexican Citizen and in August 1844 he petitioned for land along

The estate, encompassed not only the Los Americanos grant, but numerous properties in the City of San Francisco, which together were worth many, many times more than this.

the American River as follows:

I, the citizen William A. Leidesdorff, a native of Denmark, and naturalized in the Mexican Republic before your Excellency, with our respect represent: That being the owner of a large amount of stock, and desiring to obtain a tract of land on which to place them: I have found such a tract, bounded by the lands of Senor Sutter, as is shown by the annexed map: Said lands is situated on the banks of the American River, and contains 8 square leagues, that is, four leagues in length by two leagues in width. Wherefore, I pray Your Honor be pleased to grant me said land, in which I shall receive favor, Swearing that I ask this in good faith, and to whatever is necessary. Monterey, April 29th, 1844.

Leidesdorff had to take judicial possession of the grant on the American River. He visited Captain Sutter and they rode their horses to the oak marked with a slash, that was the line where Leidesdorff's land adjoined

Sutter's. Sutter as the Mexican Justice of the Peace, gave judicial possession. The grant was dated October 1, 1844.

Leidesdorff died on May 18, 1848 of what was described as brain fever, at the age of 38. Leidesdorff died without a wife or other family. Leidesdorff had accumulated a great amount of wealth in his short life, and this was all secured and taken charge of by the Commanding United States Army Officer in San Francisco, under the mistaken assumption that he was an American Citizen. There was no Probate Court in California at this time and no laws to govern probate proceedings. Colonel Mason wrote that, "...As soon as I can get the laws, now being printed in San Francisco, a court will be organized for that district, if I can find a suitable person for Judge, having jurisdiction to all that relates of administrators and the settlement of the estates of deceased persons".

At the time of Leidesdorff's death, Joseph L. Folsom, a West Point graduate, was serving in the Quartermasters Corps in San Francisco and was also collector of the port. When he heard of Leidesdorff's death, he started a search for Leidesdorff's family, if any, in an effort to make an offer for the heavily encumbered estate. From Leidesdorff's friends and acquaintances he was able to ascertain that family remained in St. Croix. In 1849 he went to Saint Croix and met with Leidesdorff's mother, his sister and niece, the only remaining family. Folsom offered the heirs \$75,000 for all right and title to Leidesdorff's estate, which they accepted, to be paid with a \$5000 deposit and 2 more payments of \$35,000 each, one in 6 months and the other in a year. The estate, encompassed not only the Los Americanos grant, but numerous properties in the City of San Francisco, which together were worth many, many times more than this. When the

Continued on page 21

first \$35,000 was due, the mother, Anna Sparks, refused the payment and also refused to give Folsom a conveyance as first agreed. The mother had heard from speculators that had visited her, that the estate was worth a great deal more than Folsom had offered.

On February 12, 1851, the First Alcalde of San Francisco found that Anna Maria Sparks was the sole heir to the Leidesdorff estate and that Joseph Folsom was to receive all of the Leidesdorff property from the administrator, per his agreement with Sparks. Folsom, by borrowing money had paid off the \$80,000 owed against the estate and the \$75,000 owed to the inheritors. Some of the buildings in San Francisco had been burned and titles to others he had to prove in court at his own expense. He also had to acquire good title to the land grant in Sacramento County.

This land grant was initially submitted to the Land Commission on September 4, 1852 and confirmed on August 12, 1855 by the Commission and the boundaries in said decree are described as follows: ...beginning at an oak tree on the bank of the American River marked as boundary to the lands granted to John A. Sutter, and running thence south with the line of said Sutter, two leagues, thence easterly by lines parallel with the general direction of the said American River and at the distance, as near as may be, of two leagues therefrom, four leagues or so far as may be necessary to include in the tract the quantity of eight square leagues; thence northerly, by a line parallel to the one described above, to the American River; thence along the southern bank of said river, and bounding thereon, to the point of beginning.

On February 23, 1857 it was confirmed by the District Court, and soon after this decree, the United States Attorney General having decided not to appeal to the Supreme Court on this decision, the following decree was en-

tered: "It is ordered, adjudged and decreed that the claimants have leave to proceed under the decree of the Land Commission heretofore rendered in their favor, as under final decree.

Soon after, the grant was surveyed and on the 29th of May 1857, 29 days after the last decree was entered, a survey was completed, returned and approved by the Surveyor General of California. This survey was known as the Hays Survey.

The survey was then sent to the Department of Interior for examination, and the issuance of a patent, should it meet the approval of the department. While the survey was in the process of being approved, Mr. Folsom began to sell parcels of the Rancho, and the Town of Folsom was surveyed and lots were sold. Mr. Folsom died suddenly in 1858 and he was not alive when news was sent that the survey did not meet the approval of the Department. Upon examination, the survey was disapproved. On Sept. 2, 1858, the Secretary of the Interior made the decision that the survey did not conform to either, the description of the land granted by the Mexican Government, the land as shown on the Diseno, or the decree of the Court. He remanded it to the Surveyor General for a re-survey.

The administrators of the Folsom Estate obtained an order from Judge Hoffman, of the District Court, upon the California Surveyor General, to return into court the plat and certificate of the "Hays Survey", that the court might proceed to ascertain the lines, of the land confirmed. Under order of the court, testimony was taken and a motion was made by the claimants to confirm the "Hays Survey". Judge Hoffman on review of the facts, decided that the "Hays Survey" was erroneous because the Diseno from which the survey was based, was erroneous, it having been found that the general course of the river is from northeast to southwest, and not from

east to west as indicated on the Diseno. Judge Hoffman perceived that if the Board had known the Diseno was in error, they would have corrected it. The facts were a little more involved than this, but this was the substance of the argument. Judge Hoffman then refused the motion to confirm the "Hays Survey".

On Nov. 22, 1859, Judge Hoffman ordered the Surveyor General to return to court a further survey, which had been done and approved by him and which was known as the "Mandeville Survey". After testimony was taken and the case argued, Judge Hoffman, on Nov. 18, 1861, delivered an opinion deciding that neither the "Hays Survey" or the "Mandeville Sur-

... Judge Hoffman, ..., delivered an opinion deciding that neither the "Hays Survey" or the "Mandeville Survey" were correct ...

vey" were correct and ordered another survey, upon principles laid down by him and filed a decree with his opinion.

On June 25, 1862 this case again came into Judge Hoffman's Court, again in regards to the "Hays Survey", the "Mandeville Survey" and the "Hoffman Survey", ordered by Judge Hoffman in 1859. Judge Hoffman reiterates the previous arguments about the surveys and why he ordered a new one made. He also discusses the hardships that will befall many purchasers of land within the Folsom Grant, if the "Hays Survey" is truly disallowed. In the end, on July 2, 1862, Judge Hoffman reverses his earlier decision to set aside the "Hays Survey" and approves the

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survey. The following is stated in the decree:

[Where the decree of the Board of Commissioners, of the District Court, or of the Supreme Court, locating a grant, is specific and plain, and it has long been accepted as finally and definitely locating the land, and large interests have been acquired on the faith of this finality, the location ought not to be disturbed, except in the case of manifest error, and on clear proof of the incorrectness of the location, and not on the mere ground that, if the question were new, the court might have located the land differently.]

You might think that this would take care of all the problems, however the United States took exception to this ruling and appealed the decision to the United States Supreme Court. The case was argued on March 16-22, 1864.

The court affirmed the decree of Judge Hoffman and stated that, "The answer to all efforts of this kind is, that the decree as a finality, not only on the question of title, but as to the boundaries it specifies. If erroneous in either particular, the remedy was by appeal; but the appeal having been withdrawn by the government, the question of its correctness is forever closed."

It appears that the Hays Survey would have been upheld by the Supreme Court, if Judge Hoffman had not reversed himself.

The final patent for this land claim was issued on September 28, 1864, approximately 7 years after dismissal of appeal and 12 years since the initial submittal to the Board. ♦

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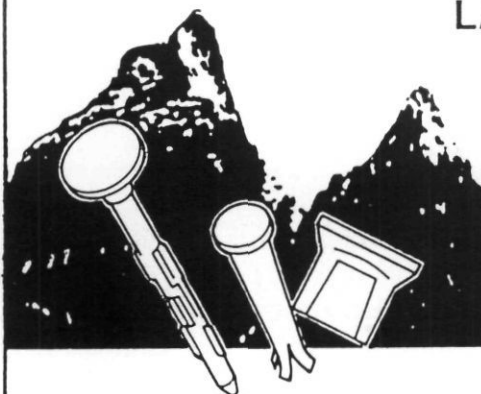
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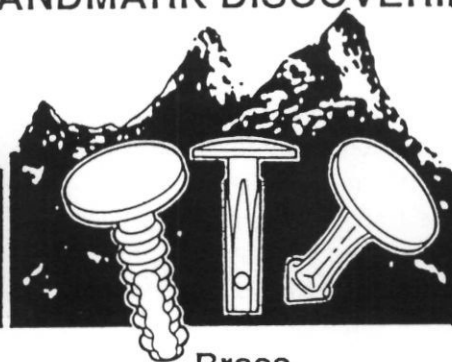
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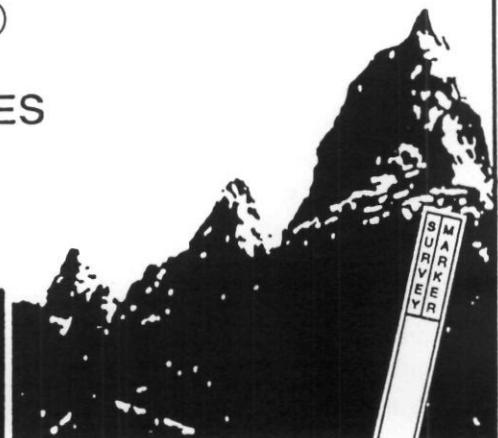


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Product News

Ashtech's Step 1 Offers a New Step in Entry-Level GPS Technology

Ashtech, Inc., the leader in high-precision Global Positioning System (GPS) technology, has announced the introduction of its new Step 1 receiver, a rugged entry-level GPS receiver providing centimeter-level accuracy to accommodate a wide scope of surveying operations. Designed for those new to GPS surveying, the Step 1 is an easy-to-learn, easy-to-use alternative to conventional optical surveying instruments, offering the first-time GPS user a powerful yet affordable system.

Trimble's New GPS Total Station Boosts Productivity and Value

BALTIMORE, MD, Trimble (NASDAQ:TRMB) introduced at the '96 American Congress of Survey and Mapping (ACSM)-the GPS Total Station 4400. This dual-frequency, real-time kinematic (RTK) GPS receiver boosts productivity and value by reducing acquisition time to 30 seconds (>99.9% confidence level) and latency to .4 seconds. The use of new technology and a focused GPS Total Station product has led to significant reductions in power, weight and cost.

The 50% reduction in acquisition time and latency means less waiting for the surveyor. The GPS Total Station 4400 operates at the surveyor's pace rather than forcing the surveyor to work at the system's pace. The new, faster RTK engine operates at a 5 Hz rate. This faster rate combined with Trimble's On-the-Fly (OTF) initialization capability makes the 4400 a good choice when surveying from a moving platform or performing hydrographic work.

The new SURF™ front end technology not only provides increased immunity to radio frequency (RF) jamming, but reduces the overall system power to 8 watts. This lower system power permits 8 hours of survey work on 4 camcorder batteries.

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The control panel has been removed and the need for accessories reduced. This has permitted a significant reduction in price for an affordable system, which has no hidden costs involved in making a base receiver and a rover receiver interchangeable. Receiver control and data storage functions are provided via the Trimble's handheld TDC1 Survey Controller.

Nikon and Tripod Data Systems Introduce New Software for the DTM-700 Field Station

Melville, New York, Tripod Data Systems (TDS) and Nikon have teamed together to develop TDS 700 Surveying software especially for the Nikon DTM-700 series Field Stations. Users of TDS can now have onboard convenience without compromise when choosing a field instrument.

TDS 700 makes data collection easier



Nikon and Tripod Data Systems have developed TDS-700 Surveying Software especially for the Nikon DTM-700 Series Field Stations

than ever, allowing for many options including control, traverse and sideshot, resection, sunshots and off-center location. Surveyors can enter alphanumeric feature

codes to identify points or use code files to easily access descriptors. A lookup table of attribute codes can be easily created in a text-editor and downloaded to Nikon's DTM-700.

For a brochure on Nikon's TDS 700 software call (800) 52-NIKON ext. P635 or contact the Surveying Department, Nikon Inc., 1300 Walt Whitman Road, Melville, NY 11747.

Nikon Introduces New Data Transfer and Conversion Software For Windows

MELVILLE, New York, — Nikon has introduced TransIt™, a new Windows™-based transfer and conversion program, to download, view/edit, export raw survey and coordinate data and upload coordinate data for stakeout. TransIt software supports the Nikon DR-48 handheld data collector and the DTM-300 Total Station, with onboard data collection.

Using the new software, data can be converted for upload and/or output in four formats including ASCII coordinate, and DXF. The new Software provides a variety of transfer options including download of coordinate and raw data from Nikon's DR-48 or DTM-300 and upload of coordinates to the data recorder or total station.

For a brochure on Nikon's new TransIt software call (800) 52-NIKON ext. P634 or contact the Surveying Department, Nikon Inc., 1300 Walt Whitman Road, Melville, NY 11747.

System Creates CAD Drawings of As-builts On-site

By combining a pen-based tablet computer, a non-contact laser distance measuring instrument, and a patented precision sketching software, Antech, Inc. has produced Anbuild that will quickly create accurate CAD drawings of as-builts on site.

"Anbuild was created as a result of a need that was identified by the Army several years ago," said Ashok Nagrani, Antech's president. The Army funded the initial research for the system through its Small Business Independent Research (SBIR) Program. What has been developed is a system that can not only be used for making accurate drawings of as-builts but also precision sketches for insurance and police investigators.

Trimble Introduces GeoExplorer II Handheld Mapping System

BALTIMORE, MD, — Trimble (NASDAQ:TRMB) introduced at the '96 American Congress of Surveying and Mapping (ACSM) — the GeoExplorer™ II mapping system, the next generation of Trimble's handheld GPS/GIS mapping products. This new handheld GPS features external antenna capability making it ideal for use in vehicle or with a rangepole. In addition, the GeoExplorer II system now includes advanced data processing through PFINDER software, allowing the user to customize feature and attribute collection menus.

Georesearch, Inc.

The GeoLinkX PowerMap™ GPS/GIS Terrain Reconnaissance Tool Washington, D.C.-GeoLink GPS/GIS PowerMap™ for Windows '95 builds on GeoLink's field proven techniques for rapid collection of large volumes of geocoded data for GIS and CAD systems. Features such as full screen multiple raster map display, integration with laser rangefinding binoculars and built-in macro language for translation to most GIS and CAD

formats, make it the ideal tool for precise terrain reconnaissance and inventory missions. PowerMap is also "Open GPSTM", and integrates with nearly all GPS receivers, including GeoResearch's GPS Workhorse to provide real-time, superior GPS tracking under tree canopy and in urban canyons. Call 1-800-GEOLINK for further information

Ashtech Announces A Lighter, Smaller Centimeter-Level Global Positioning Receiver

SUNNYVALE, CA— Ashtech, Inc., the leader in precision solutions for global positioning, today introduced the Z-12 Sensor receiver — the fastest real-time, centimeter-level Global Positioning System (GPS). The system is ideal for topographic surveying, volume calculations, mining and other applications that require high accuracy, high update rates and low latency.

Business Editors & Computer Writers

SUNNYVALE, CA. — Ashtech, Inc., the leader in precision solutions for global positioning, today announced the introduction of its GG24 receiver, the world's first single-board receiver to tightly integrate U.S. Global Positioning System (GPS) and Russian GLObal Navigation Satellite System (GLONASS) satellite-based navigation technologies.

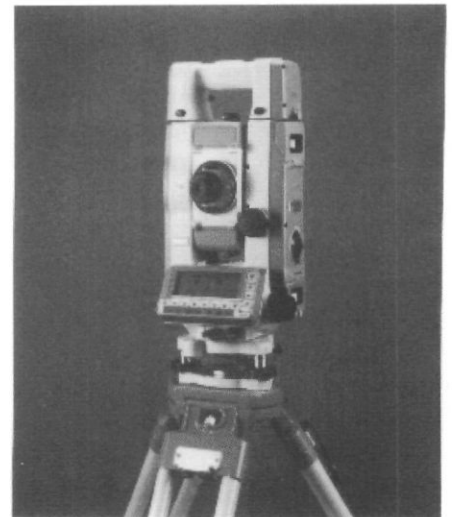
Ashtech, Inc., has announced a strategic agreement with Tripod Data Systems (TDS), a leading developer of handheld and PC software for the survey and mapping industry, to release a modified new version of TDS's Survey Pro software that will interface with Ashtech's real time kinematic GPS receivers and allow high-precision data collection and positioning at the centimeter level. In demanding high-precision GPS applications, the new Survey Pro with GPS pledges to set a new

standard in timely and efficient real-time kinematic survey and mapping maneuvers, offering an easy-to-learn, practical alternative to conventional data collection systems.

Nikon Introduces Enhanced Mapping Software

MELVILLE, New York, Nikon has introduced an enhanced version of its NS-700 V2.0 which allows a surveyor to download a day's field work within minutes of completing, reduces data to coordinates, and view survey information on a computer screen. NS-700 also provides for easy export of coordinate and graphical data to third party software packages.

The new least squares traverse adjustment feature is flexible and easy to use. Surveyors can now input expected error tolerances for angle and distance measurements. The software provides an optional 2D or 3D adjustment.



Nikon's enhanced AP-700 software offers exciting new functionality for users of Nikon DTM-700 Field Stations.

For a brochure on Nikon's new NS-700 V2.0 Mapping software call (800) 52-NIKON ext. P631 or contact the Surveying Department, Nikon Inc., 1300 Walt Whitman Road, Melville, NY 11747.



Here's Some Important Information About CLSA

The goal of the California Land Surveyors Association is to promote and enhance the profession of surveying, to promote the common good and welfare of its members, to promote and maintain the highest possible standards of professional ethics and practice, and to elevate the public's understanding of our profession. CLSA represents all land surveyors, whether they are employees or proprietors, whether in the public or the private sector.

Representation

- LOCAL: Your local chapter represents you in local issues. Through your chapter representative to the State Board of Directors, the individual member can direct the course CLSA will take.
- STATE: The surveyor is represented at the state level through an active legislative program, legislative advocate, and liaison with the State Board of Registration.
- REGIONAL: CLSA is an active member of the Western Federation of Professional Land Surveyors. This federation is composed of associations throughout the western United States and addresses regional issues.
- NATIONAL: Through institutional affiliation with the National Society of Professional Surveyors and the American Congress on Surveying and Mapping, CLSA is represented at the national level.

Education Opportunities

CLSA presents annual conferences which provide technical and business programs, as well as exhibits of the latest in surveying and computing technology. Seminars and workshops are presented to assist in continuing education. CLSA publishes the *California Surveyor* magazine and the *CLSA News* to keep the membership abreast of changing legislation, legal opinions, and other items which affect our profession.

Business and Professional Services

CLSA provides a fully staffed central office which is available to answer questions or to provide up-to-date referrals concerning legislation, educational opportunities, job opportunities, or other issues concerning our membership. Health and professional liability insurance programs are available to members.

Join CLSA Today!

Application for Membership in the California Land Surveyors Association

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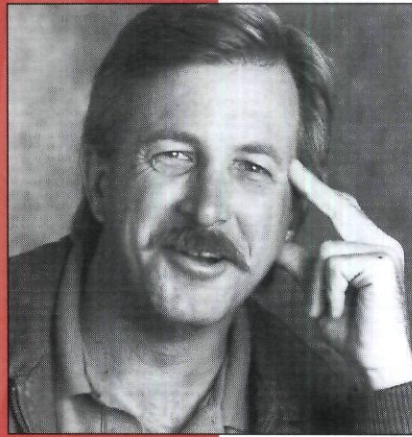
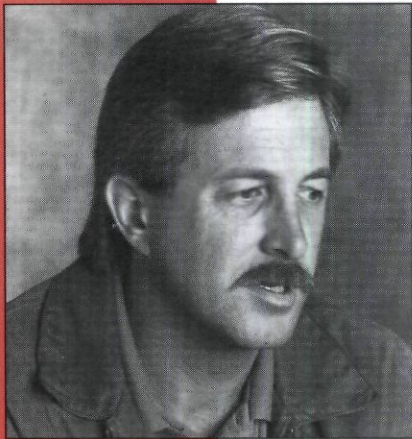
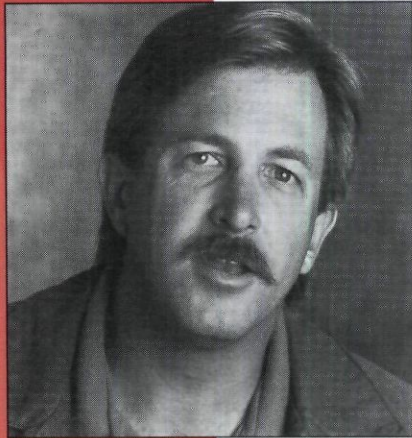
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