



## T-28

by Frank Cuden

### Early Ground Pounding

by Merrill Anderson

When aircraft began to look "useful", the first military task considered was reconnaissance. The second thought was how could you do damage to the enemy? This was not an easy proposition with early aircraft, which could barely get off the ground with a full load of fuel, oil, and crew. Although the US Army experimented with carrying a Lewis machine gun up on an early Wright flyer, in 1912, the weight of the gun and ammo made the plane perform poorly, and accurately

aiming the gun was considered impossible, (and the test scared the hell out of the ground observers) so the experiment was abandoned. In 1913, Vickers Ltd., the infamous Sir Basil Zaharoff's arms company, tried to sell more machine guns to the Royal Army by putting its Vickers gun on the F5B, "Vickers Gun Bus". The RFC bought the plane, but immediately dismantled the gun.

When the Great War started in 1914, almost all military aircraft were armed only with whatever pistols and rifles the crew could carry, with one exception. Most of

the early 'scouts' were given a small can or box filled with flechettes, lengths of steel rod, wickedly pointed at one end and balanced to fall point down. Although such a 'missile' could easily kill a man or horse (horses were still the main 'movers' throughout the war) few injuries were ever reported.

The idea of bombing from the air had been around since the middle ages, Da Vinci, among others, had considered it, but the whole matter was strictly theoretical, until an Italian pilot

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## TCAH Officers

**President**, Bob Maderich

**Vice-President**, Larry Donovan

**Secretary**, Bernie Kugel

**Treasurer**, Steve Jantscher

**Historian**, Tom Norrbohm

## Newsletter Info

*Article Submission Deadline: 22nd of each month.*

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## TCAH This Month

The monthly meeting will be held Saturday November 8, at Fleming Field, South St. Paul, beginning at 1:30 pm. Vendor baiting will begin about 12:30, so come early.

Picture your model here! Send me a photo of your model, and it'll be used to fill these little white spaces at the ends of the columns.

## From the President

*by Bob Maderich*

Well, it's fall and we're back to serious modeling time again. Enough of those outside activities, get to the bench! First off, congrats to all on a most successful 2008 Nordicon show. I was very impressed with the vendors, the hall, and the great participation from TCAH members. I hope we can return to this venue in 2009.

This is my last president message, as we will elect all new officers this month. It has been my pleasure to be your leader for this past year. I have been pleased with your response to some new ideas, (i.e., change of venue for Nordicon, renewing the club contest, more forums focusing on modeling, etc.) This is a great club and new ideas and new members will serve us well into the future.

So, about that club contest.

- 1) Bring all the models you have completed in this calendar year.
- 2) We will establish categories depending on what shows up, but probably, aircraft, armor, ships, figures, dioramas, misc. If we need splits, that will happen as well.
- 3) Voting will be by popular choice. You will be given a ballot and will choose your favorite model in each category. There will be no sweeps.

Prizes will be gift certificates to our four vendors, in 3 increments. \$25.00 for gold, \$15.00 for silver, and \$10.00 for bronze. The contest will cost the club roughly \$300.00 and I think it is a nice way to wrap up the calendar year. It's a nice thank you to each other and to our loyal vendors.

So, here's to a good auction, DON'T forget to clean out those closets, and be there in November to cast your vote for the new officers.



## From the Vice President

*by Larry Donovan*

I would like to start off this month's column with a great big thanks to everyone at the October meeting, the first Twin City Aero Historians' meeting I presided....did the nervousness show??? I also want to thank Don Stauffer for his wonderful and informative presentation on photographing models; well done Don!! Also there were some great models on the table so thank you to their builders! Finally a big thanks to those willing to run for club officers, your involvement and input makes a difference. Remember, there are lots of ways to help out in the club, both big and small: running or organizing a club contest or challenge; taking charge of one of the many activities for Nordic Con; organizing our annual Club Awards program; or any of some dozen other "things that need being done".

There is a lot to come in the November meeting that I would like to remind everyone about so most of my column this month will be on those subjects. First, and I referred to it above, is the election of the Club's officers for the coming year. Hopefully, as in past years we can have a maximum turnout for this important part of the membership. I encourage you to read the backgrounds found in the newsletter by the candidates so we can make informed choices. This is your chance to make a difference by selecting the officers you feel will best represent you and the clubs interests.

Second, that annual treasure trove that is the club auction happens this month. Bring those kits off from the "Island of the Lost Models" that is found in all our shelves of doom because one modeler's refuse is another's "Pot o' Gold". And don't forget decals/aftermarket/books as some of us (all of us? most of us?) cannot get enough of these as well. For your auctioning

*(Continued on page 3)*

(Continued from page 2)

entertainment we will have the usual banter, and who knows maybe a guest auctioneer or two along the way (Mark? Terry? Who knows!!!). I will not say I'm looking for anything **in particular**, however, a certain Bell Aircraft product with tricycle landing gear, mid-mount engine, 37 mm cannon but I have said too much...I do have that aftermarket decal set I won in the raffle at Omacon this past year...oh, 1/48th scale please.

Dues are due...a terrible way to phrase it, but bring those dues checks to the meeting and Steve will collect them before the auction. The regular membership dues are the same as last year, \$10; with seniors and juniors \$5. Also if you are not getting the mailed copy of the newsletter and are supposed to, let Rick know so he can take care of any snafus...we want to get it right for everyone!

We have had some cleaning out of models from the display case at Fleming. If your cabinets are overflowing, please consider bring a model or two or three to show the general public our talents. We'll have the display keys ready so you can use this rather neat way to show off your talent. I think I'll bring my 1/144 TF-104G; should I include a magnifying glass? Let's represent the club in this great fashion!

One last thing before I close. One of our advertisers for the last several years, Hobbytown USA in Woodbury, will be moving to Oakdale the last part of October. The new location will be in Bergen Plaza between the Rainbow Foods and Hunan restaurant; on 10th St North and 694. Same phone number as on the advert in this issue. In the interests of full disclosure, yes I work there on a (very) part-time basis, but more importantly isn't it better to see a hobby store continue in business rather than fold up (which seems to happen all too frequently these days). Until the meeting happy modeling!



### Airline Chatter

by Terry Love

U S airlines are taking 512 airliners out of service this Fall - the equivalent of grounding Northwest Airlines' entire fleet! The number of mainline jets will shrink 7% while more than 11% of regional jets will be taken out of service. Among the big carriers, United Airlines is making the deepest cuts, grounding 94 Boeing 737s and 6 Boeing 747s.

A new European private jet company, similar to NetJets here in America, bought 110 Bombardier CRJs for \$2.5 Billion.

Northwest Airlines and Delta Airlines board of directors, voted to accept the merger. The new combined Delta Airlines will serve 340 destinations in 67 countries. The new fleet will be nearly 800 airliners with 75,000 employees.

Boeing announced that they received 24 new orders for the Boeing 767. All Nippon Airways ordered 9, Japan Airlines ordered 9, and Azerbaijan Airlines ordered 6. These orders are mainly stop-gap fillers until the Boeing 787 Dreamliner becomes available. These were all sold at cut-rate prices.

Boeing now has 1219 orders for the Boeing 787 Dreamliner that has not flown yet. Boeing is planning a production rate of 14 per month.

Northwest Airlines lost \$317 million in the third quarter of 2008.

United Airlines lost \$519 million in the third quarter of 2008.

Delta Airlines lost \$26 million in the third quarter of 2008.

American Airlines lost \$360 million in the third quarter of 2008.

Continental Airlines lost \$236 million in the third quarter of 2008.

Southwest Airlines lost \$120

million in the third quarter of 2008. This is mainly due to their fuel hedge pricing expiring. All of the above losses, are due to high jet fuel prices during the summer. The third quarter (June - July - August) is usually when airlines have the highest load factors and passengers - the most profitable.

United Airlines said that they would sell "certain assets" for a total of \$275 million by the end of this year.

Southwest Airlines enters a new city!! That city is Minneapolis. Southwest Airlines will begin serving the Midway (Chicago) to Minneapolis market soon.

Sun Country Airlines has filed for bankruptcy.

Boeing and the IAM union there, are on strike. No aircraft are being built. This strike could delay the new Boeing 787 Dreamliner deliveries until around 2010.

American Airlines finally came through planning for the future. American Airlines ordered 42 Boeing 787 Dreamliners worth \$8 Billion. Options were for 58 more Dreamliners. Deliveries will be stretched over 8 years from 2012 through 2020. The Dreamliners will hold up to 290 passengers up to 8,500 nautical miles.



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there some things we can do with our Treasury for **our** club and its members and what we believe is important. Finally we as leaders in the club need to ensure we are accessible and open to all the membership. We can't be all things to all members, but I promise to give it a helluva try. Thanks for taking the time to read this and please come to the November meeting and vote.



## GENERAL MEETING MINUTES – October 2008

Larry Donovan called the meeting to order at 1:25. Axel and John gave their vendor reports. Tom Schutrop presented Show-n-Tell. And Don Stauffer gave a presentation on photographing models. Steve Jantscher gave his final Tres. Report. Bernie gave his wrap-up for NordicCon. For officer nominations: Fletcher Warren for secretary. Jeff Fries for Treasurer. Bernie Kugel's "Hand-Brushed" contest has been moved to May. Remember that the club auction is this month. The club decided to keep dues next year at \$10 for members and \$5 for juniors and seniors.



## ELECTION MADNESS!

After practicing on November 4th, be sure to be at the November TCAH meeting and vote for club officers! The following nominations have been reported to the Newsletter:

President: Dave Nelson  
Vice  
President: Larry Donovan  
Secretary: Merrill Anderson,  
Fletcher Warren  
Treasurer: Jeff Fries,  
David Huffmeyer

Several nominees have submitted introductory write ups, in case you don't know who these guys are. Look for them elsewhere in the Newsletter.



## AUCTION MADNESS!

Immediately after the club elections, the annual TCAH Shelf of Doom—Gotta Have It Auction will begin! Come for the elections, but stay for the chance of a lifetime (well, maybe a mayfly's lifetime?) to get a heckuva deal on what we all need—more models!



## INTRODUCING

*Jeff Fries*

I have been a member of this club since the first year of existence.

I have done the Nordicon raffle for the last four years.

I worked at the shows the club did in the 60's and early 70's .

I worked at Roll Models for 9 years.



## INTRODUCING

*Larry Donovan*

For those who may not know me, I am Larry Donovan and am running for re-election for the position of Vice President of the Twin City Aero Historians. In case you are new to the club I am currently serving the club in the role of Vice President, after previously being Club Secretary for two years. In addition I have organized the registration table at the last three NordicCons...so if you are one of those who were in a long line the last three years, blame me not the great volunteers who helped with the process.

As a little background, I started modeling back in the sixties, on kits like the Hawk chrome-plated U-2; Monogram's Duesenberg Phaeton; Lindberg's F6F (the 1/96th scale or so). Like many other modelers, I went from spending money on kits/glue/paints to girls/cars/beer...and college (Creighton University—the Harvard of the Missouri River!). I got back into the hobby about 8 years ago. I build aircraft and armour, although I have picked up a couple of car kits, a ship or two, and even some figures. I live in St. Paul, where my lovely wife Ann puts up with this and even encourages me in my hobby, even though I have sort of "taken" over the hobby room with my kit stash (which I am **very**

hesitant to count) and the work-bench in the garage.

As I have been thinking about my running for office again, I have sought feedback from various club members and have some ideas and what I feel we should focus on the club in the coming year. In addition, I think we, as a club, had some very successful things happen that point to a great 2009 ahead. First the positives: a successful NordicCon thanks to Bernie Kugel and crew; keeping the dues as low as we can for the second year in a row; the consistent speaker/forum program at the meetings; member sponsored contests and challenges thanks to Merrill Anderson and Bernie Kugel; and a surplus in the Treasury.

We do have opportunities, as a club, for more, and in this I would like to put, for lack of a better term my "position statement" on some of the things I would like to work on if you choose to re-elect me as the club's Vice-President. First and foremost is to have fun as a club—maybe a pizza meeting (and everyone brings an "Italian-themed" model?), outside of our "normal" pizza meeting days (and it does not have to be pizza, it could be Mexican/Tacos or whatever). Second, I would like to work on getting the Judging School program started up and going so that if we are going to make a commitment to have a judged NordicCon this year (2009), Bernie has a "corps" of judges for the event. Thirdly, we need to remember our "history" as a club and make sure that events like our Club Awards Meeting incorporate again that sense of where we have been as well as where we have been going. Fourthly, we need to be fiscally responsible but must temper that with some other considerations; for example are we going to donate to the troops in harm's way (which we have the last several years); or can we have a raffle at the meetings again. I am not saying "spend baby spend" (to co-opt a phrase) but are

*(Continued on page 3)*



## Book Review

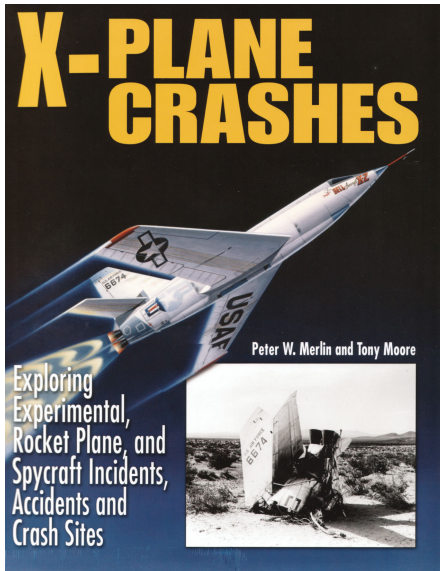
### ***X-Plane Crashes***

by Peter Merlin and Tony Moore

Published by Specialty Press

2008

Never before had the words "from triumph to tragedy" carried so much meaning, but the path to aviation progress is littered with cruel examples of this tenet. The Bell X-2 rocketplane pictured on the cover of this book perhaps best represents this phenomenon, for it became the first airplane to fly at three times the speed of sound in September 1956. Yet only minutes after accomplishing this historic feat, the sleek white craft lay scattered in scorched pieces on the desert floor, its pilot having perished in the crash.



While historic focus always centered on the X-2's out-of-control tumble that ended near Edwards Air Force Base, California, authors Peter W. Merlin and Tony Moore channeled their fascination with this subject into finding the exact spot where the X-2 last flew. Using vintage photographs of the area, they matched the images of distant mountains and stark Joshua trees to the physical characteristics of the terrain under their feet, and soon discovered the hallowed ground where the X-2 fell to earth.

This book tells the tale of many

such sojourns, exploring the crash sites of rare research airplanes from the North American X-10 Navaho and XB-70 Valkyrie to exotic black world creatures with names like Blackbird and Nighthawk. Told in vivid detail—and in many cases for the very first time—are the colorful and in-depth stories of these accidents, and what became of the programs involved. In many cases, these crashes involved test pilots with legendary names, and their stories are uncovered here as well.



Experimental test flying is like no other type of aviation, for everything ever done to, with, or by an airplane had to be accomplished for the very first time by someone called a test pilot. In the early days of the supersonic era immediately following World War II, daring and courageous men did things in airplanes that had never been done before while reaching for speeds and altitudes that were pure science fiction only several years earlier, and many of these men perished in the process while ground-bound engineers learned what worked and what didn't. By comparison, in the modern digital age, these sobering lessons can be learned in the warm comfort of a computer lab or simulator, but make no mistake—today's safe and reliable aircraft with their amazingly impressive safety records are indeed the direct result of the sacrifices made by these brave test pilots from an earlier time. Thankfully, not all of the crashes covered here ended with the loss of human life, but there were valuable lessons learned nevertheless.

This book takes you to the very last places that many of the world's most pioneering airplanes ever touched the earth, and in many cases employs both archival and modern photography to show

the reader these locations as they appeared immediately after the crash, and then as they look today. Additionally, comprehensive appendices accompany these stories containing a vast storehouse of information on each and every accident that took place in the barren stretches of the Mojave and beyond, from 1930 to the present.

With deep reverence and respect for the sanctity and history of these sites as well as the people being memorialized, authors Peter W. Merlin and Tony Moore—better known today as the X-Hunters—carefully combed the ground for evidence of what happened in those final fateful seconds of flight that ended there decades ago. In so doing, they discovered valuable and compelling pieces of aeronautical puzzles that, when fully assembled, represented some of the most exotic and revolutionary aircraft ever flown.

The heroes who flew the X-planes were risking their lives to further advance the study of aviation and space travel. Often they flew outside the envelope, causing the loss of an aircraft and sometimes the loss of life. This book captures the thrill and danger of test flying and the detective work of locating the crash sites of these aircraft.



These photos and the crash sites they depict have rarely, if ever, been seen by the general public. The author's extensive use of historic government documents and rare photos are matched by contemporary photos of the crash sites today.

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dropped four contact fused hand grenades on the Turks during the North African War in 1911. The Turks made an official complaint of a "war crime", although little actual damage occurred.

In 1914, no one, not even the Zeppelin-crazed Germans, had bombs designed for air delivery. The Zeppelins were initially equipped with 8-inch artillery projectiles with blankets wrapped around the base, like a kite tail. Other early bombing was attempted with hand grenades or modified light artillery shells, with fins riveted to the back, to fall point (fuse) downward. The early loads were very small, as the early planes could not reliably get off the ground with 100 or even 50 pounds of extra weight. Still, bombing missions were attempted by all sides, from the earliest days of the war, with the British bombings of the Zeppelin sheds the most spectacular; although with only two out of 12 sorties successful it was not a great start.

Attacking enemy ground forces was not forgotten, but the only weapons generally available were hand grenades and flechettes, neither of them very damaging weapons, and literally "hit or miss". The arming of aircraft with machine guns, in 1915, started to change things. At first, before the introduction of the Morane deflector wedges, and Fokkers' subsequent development of an interrupter, only two seaters were armed, and with guns meant to harass or down other aircraft. With limited downward fields of fire, trench strafing meant getting very close to the ground, and infantry were not shy about shooting back at the slow moving planes, so generally, attacking trenches was not officially approved.

Ground attack did have its' proponents. An early advocate was Major A.A.B. Thompson, of 19<sup>th</sup> Squadron, R.F.C. 19<sup>th</sup> Squadron

had the unenviable job of 'contact patrol'. In an era before portable radios, commanders couldn't know where exactly their troops were, especially during attacks or retreats, so planes were sent to keep track of them. This meant flying close to the ground, and observing what was happening to the infantry, (and hopefully keeping friendly artillery from shelling them). Major Thompson became 'famous' as "the mad major" for his determined strafing attacks against the German trenches. Flying very low, he was reported to return from some flights with barbed wire tangled in his landing struts! Flying a BE2c alone, he would load up with Mills bombs, and relentlessly bomb and strafe the German trenches, usually turning the BE2c into a sieve in the process.

Although the RFC brass considered such attacks to be insignificant, the effect on German morale was noticed by *their* brass. The Germans began to develop dedicated ground attack aircraft. The results were the 'armored' J series and the light CL series two seaters. In late 1917, during the Somme battles, German attacks (by Schlachtstaffeln, dedicated ground attack units) against the British bridgeheads, finally brought the RFC around to the value of ground attack.

To 'catch up' while awaiting purpose built aircraft (such as the Sopwith Salamander), the RFC (after April 1918, the RAF) armed fighter aircraft with light bombs, usually four 20 pound Cooper bombs, and sent them out to attack Germans positions. If you have read the memoirs of British fighter pilots, you would notice that about half the sorties flown in 1918 by fighter units were ground attack. In unarmored types, this was dangerous work, and casualties were high, but the attacks went on. So was 'born' the fighter-bomber.

(Continued from page 5)

This book strongly appeals to arm-chair detectives, aviation enthusiasts, and hikers with a sense of history. Authors Peter W. Merlin and Tony Moore have located more than 100 crash sites of exotic aircraft from Edwards Air Force Base and Area 51. Together, they have recovered parts of supersonic rocket planes, stealthy spy craft, and vehicles that have reached the edge of space. Each story in the book profiles an unusual aircraft and the brave men who flew it. The authors examine the contributing causes of each crash and use then-and-now photographs to illustrate their findings. The stories end with The X-Hunters' search for the crash site and what they discovered. Each adventure combines C.S.I.-type skills with *X-Files* persistence, with a dash of *Indiana Jones* for adventure. Aircraft profiled include the YB-49 and a pair of N9M flying wings, X-1 A, X-1 D, VB-51, XB-70, SR-71, YF-12, U-2 prototype, and many more.

*Peter W. Merlin is an archivist and historian at NASA Dryden Flight Research Center, under contract to TYBRIN Corporation. He is the author of Mach 3+: NASA/USAF YF-12 Flight Research, 1969-1979 (NASA SP-2001-4525) and co-author of Donald L. Mallick's autobiography The Smell of Kerosene: A Test Pilot's Odyssey (978-1410219053), and Archangel to Senior Crown – Design and Development of the Blackbird.*

*Tony Moore is a museum assistant at the Air Force Flight Test Center Museum at Edwards Air Force Base. He is also a graphic artist and previously served as an audio-visual archivist at NASA Dryden Flight Research Center, under contract to Analytical Services & Materials, Inc. He is a founding member of the X-Hunters Aerospace Archeology Team and a member of the Flight Test Historical Foundation.*





**My Workbench**  
by Frank Cuden

Thought, this time, I would send a photo of my very functional, yet messy modeling bench! Problem is, I know just where everything is and can reach most of it by just sliding around in my chair, with the exception of the higher shelves. Very all-inclusive. Some have offered to "organize" it for me but no dice - I'd

never find a thing after that!!!! The photo below the wall light switch is of General Jimmy Doolittle and me at the old DuPont Hanger taken by now-deceased member Bob Nelson back in 1971, I think. The General was in Minneapolis to serve as that year's Aquatennial Parade's Grand Marshall. The CAF had a B-25 adjacent to the hanger and when General Doolittle got off of the Lear he arrived in, he immediately made

his way, like a magnet, to the B-25, much to the consternation of the Aquatennial Committee gathered there. He climbed aboard in the Co-Pilot's seat, strapped in and away they went! I distinctly remember them making a low pass down the Northern-most runway. The tower must have put a hold on flight operations for that brief time period. Can you see that happening these days?



**ON THE TABLE October 2008**

Modeler	Kit	Manufacturer	Scale	Notes
Sean Brzozowski	Saab Drakken	Hasegawa	1/48	
Frank Cuden	T-38	Sword	1/48	
""	XF8U-3 Crusader	Anigrand	1/72	
""	F-8C Crusader	Academy	1/72	
Don Stauffer	XP-56 Black Bullet	Czech Model	1/48	
Nick Rewey (age 6)	Spitfire Mk.1		1/72	
John Dunphy	T-55	Tamiya	1/35	
Steve Jantscher	A6M5 Zero	Tamiya	1/48	
Bernie Kugel	Leopard (WIP)	1/35	Italeri	
Bernie Kugel	Ju-87G Stuka	1/32	Hasegawa	

## Directions to the Club Meeting Location

**Where: South St. Paul Municipal Airport, a.k.a. Fleming Field,** located on the southern extremity of South St. Paul, south of I-494, west of Concord Street and East of Highway 52.

### If coming from the western Twin Cities going east on 494:

- Exit at the 7th and 5th Avenue exit (Exit No.65)
- Turn right (South) on 7th Ave and go approximately .6 miles to a 4-way Stop sign. This is South Street W. To your left there will be a McDonald's; to your right front there will be a Walgreen's.
- Turn left (East) at the 4-way Stop onto
- South Street W and go approximately .6 miles. Along the way you will encounter three more Stop signs—the third Stop sign (Henry Avenue) will be a "T" intersection. At the "T" intersection on your left will be homes and on your right softball fields.
- Turn right (south) onto Henry Ave. and go approximately .2

miles toward the Fleming Field airport terminal building.

### If coming from east Twin Cities on westbound 494:

- Exit at the 7th and 5th Avenue exit (Exit No.65)
- Turn left (South) on 7th Ave and go approximately .6 miles to a 4-way Stop sign. This is South Street W. To your left front there will be a small strip mall; to your right there will be an Amoco station.
- Turn left (East) at the 4-way Stop onto
- South Street W and go approximately .4 miles. Along the way you will encounter two more Stop signs—the third Stop sign (Henry Avenue) will be a "T" intersection. At the "T" intersection on your left will be homes and on your right softball fields.
- Turn right (south) onto Henry Ave. and go approximately .2 miles toward the Fleming Field airport terminal building.

The terminal is on the right with parking available.

Twin City Aero Historian  
**Rick Schmierer**  
 1852 E. 39 Street  
 Minneapolis, MN 55407

Return address requested

The Aero Historian is published monthly by the Twin City Aero Historians, Inc., a joint chapter of the American Aviation Historical Society and International Plastic Modelers Society/USA, for members and readers as part of their annual dues or fees.

The group is open to aviation enthusiasts from teenagers on up who are interested in aviation modeling, photography, collecting, art and writing. For more information contact Ken Hornby at 651-552-0888

The Twin Cities Aero Historians (TCAH) meet the second Saturday of every month at 1:30pm.

See above for the new meeting locations and directions.

Mail Newsletter material and address changes to the treasurer.

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