



AUX TANK

Newsletter of the San Fernando Valley Chapter of
THE NINETY - NINES
INTERNATIONAL ORGANIZATION OF WOMEN PILOTS

MARCH 2007

February's Fly-in

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On February 11, Bertie Duffy, Kathy Crawley, Jeanne and Bill Fenimore, Lilian Holt, Marion McNiff, Ceci Stratford, Chuck Kamphausen, Michael and Paula Sandling, her niece Kim and grandniece Laura went to the Oil Museum in Santa Paula. The "At the Controls" exhibit was on loan from the Smithsonian National Air and Space Museum, including a simulator.



The group also had the opportunity to see the oil businesses' offices and one of the living quarters furnished as it was in the late 1800s and early 1900s, when oil the *black bonanza* created wealth, work, and prosperity for generations of Californians. Although the fly-in turned into a drive-in due to weather, everyone had an enjoyable day and found the exhibit and museum very interesting.

(Photo: While waiting their turn, Jeanne and Kathy enjoyed watching Paula and Laura "play" in the simulator.)

Chapter Chairman's Report

In the last few days I have seen tulips, marigolds, and roses, and that is just in *my* yard. I guess that means spring is on the way. The weather seems to be improving also. And now that it is daylight later, flying should improve.

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The San Fernando Valley Chapter of The Ninety-Nines was founded on February 1, 1952. The mission of The Ninety-Nines is:

- To promote world fellowship through flight.
- To provide networking and scholarship opportunities for women and aviation education in the community.
- To preserve the unique history of women in aviation.

Short Final...March

Chairman's Report continued from page 1

We will have a guest speaker at the April Meeting. His name is Robin Petgrave and he is the Explorer Leader from Compton who is encouraging young people from his area to learn to fly. He has flown several of his Explorers to Canada so that they can solo when they are 14 years old. Robin wants to bring one of these young men with him to our meeting and it should be a very interesting presentation.

Hopefully, you are all out there selling raffle tickets for the B-17 ride on April 21; we will be drawing the lucky winner at the next Chapter Meeting on April 2. When everyone gets the word out and promotes sales, the B-17 ride is one of our more successful fundraisers. Everyone wants to fly in that wonderful, historic airplane! SFV99s can download the tickets on our website www.sfv99s.org in the members-only section.

The nominating committee is busy looking for a slate of officers for next year's Chapter Board of Directors. If you are interested in serving your chapter by being a board member, contact Bertie Duffy, Lorrie Blech or Melinda Lyon.

We have lots of flying activities planned during the next few months. March's fly-in is the Antelope Valley Chapter's Poker Flight. It is a great way to see the desert in the spring - maybe the wildflowers will be out. Also, there are great door prizes. Poker Flight Flyers have been e-mailed via the listserv.

In April, we will be flying to Apple Valley to air mark a compass rose with the Hi-Desert Chapter. If you have never seen one, you can find a few examples on The Ninety-Nines' website at www.ninety-nines.org. The Hi-Desert Chapter will be hosting the lunch and we expect to have lots of fun.

May is the Southwest Section Meeting in Santa Maria. Since Santa Maria is so close and such a nice place, I expect that we will have a big turn-out. June's fly-in might be a trip to someplace like Harris Ranch.

Our Awards Luncheon will be on June 9th. We will be honoring the Pilot of the Year, the Rookie Pilot of the Year, and the Schubert Service Award recipient. The application forms for these awards are now available on our web site. View the form and apply whether you think you will qualify or not; you might be surprised! We will also be honoring our 49 ½ of the Year and our Friend of the 99s. If anyone has suggestions for the latter, please give your suggestion to a board member.

See you at the Airport.

--Jeanne Fenimore



Rose of Achievement

Doris Minter earns a Rose of Achievement for winning the Ventura County 99s' Emergency Maneuvers Training Scholarship. Congratulations Doris!

March Membership Anniversary

Happy Anniversary to our SFV99s!

1956	Jan Wood
1974	Michele Albiez
2001	Linda Hernandez
2003	Marilyn Perna
2004	Linda Worden
2004	Julie Fung
2006	Jessica Brooks
2006	Dana Schwarzwalter

Happy Birthday!

March 2	Ceci Stratford	March 21	Jan Archibald
March 6	Erin Thorpe	March 21	Linda Worden
March 11	Kathy Smither	March 24	Sylvia Sanderson
March 12	Joanne Davis	March 27	Jennifer Mindock
March 14	Natasha Pavlova-Ferrand	March 30	Maureen Kenney

Guests

Guests at the March Meeting were Elysee Alexander, Marie Estrada, and Debbie Debber. Thank you for joining us at our meeting. We hope to see you again!

Member of the Month

Paula Sandling, Doris Minter, Ceci Stratford, Jeanne Fenimore, and Carin Counihan received Member of the Month recognition at the March Meeting for being Alaska Flying Panelists at the February Meeting. Special 49 ½ recognition went to Rex Minter as well. The six panelists gave a great presentation on their experiences flying to and in Alaska.

Aviation Explorer Post 747

We currently have eleven Explorers. A few have dropped by the wayside. Two washed out because they could not meet the grade requirements for flight lessons. We now have five girls with good grades! Hopefully all of the SFV99s will get to know them.

On February 20, Ashley Steven and Ruth Logan attended the annual Greater Los Angeles Area Boy Scout Business meeting at the Odyssey Restaurant. Ashley was asked to give a speech about our Aviation Explorer Post. She did a magnificent job. Without pre-approval or editing, Ashley delivered a wonderful speech giving credit to the San Fernando Valley Ninety-Nines for Post 747's successes, and that she was proud to be in their Future Women Pilots Program. The majority of the audience (99% male) did not have a clue what a 99 was. By the time



Ashley Steven enlightens the "Boys"

Ashley finished they knew that a small band of women pilots called The Ninety-Nines is making a great contribution to the youth in our community.

The Post is hosting a fundraiser on March 17 from 11:30-4:30. They will be selling hotdogs in front of Albertsons, located on the NW corner of San Fernando Mission Blvd. & Woodley Ave. Two bucks will get you a hot dog, chips and soda – what a deal!

On March 25, the Post will be washing one SunQuest plane. If you are interested in having your plane washed the same day for \$40, contact Ruth Logan for details.

--Ruth Logan

March Fly-In

The SFV99s March Fly-in will be the Antelope Valley 99s Annual Poker Flight on Sunday, March 18. Call Ruth Logan or Jeanne Fenimore for details.

Turning Base...April

Aerospace Education

Please look in your log book and personal calendar to collect a list of your activities, and turn in your Aerospace Education form. We are in the last few weeks of the Southwest Section Aerospace Education competition which runs from April 1, 2006 to March 31, 2007. A list of activities that count and a reporting form are posted on the SFV99s website. Turn your forms into Linda Worden or Kathy Smither **before the end of March**. Come on ladies – we want to win this award!

\$3000 Career Scholarship

Applications for the SFV99s Career Scholarship are available at www.sfv99s.org in the Community Outreach section or by calling (818) 989-0081. The SFV99s Career Scholarship is open to U.S. Citizens who are 20 years of age or older, reside in the greater Los Angeles area, and are pursuing a career in aviation. Applications must be postmarked by April 27, 2007. Please note that members of The Ninety-Nines are not eligible.

B-17 Fundraiser

The EAA's WWII B-17 will be at Van Nuys Airport on Thursday, April 19 through Monday, April 23. For a fundraiser the SFV99s have purchased one ticket for a ride on the B-17 to be raffled. The ride is for **Saturday, April 21 at 10:30 a.m.** from the Syncro hangar. The Chapter is selling \$5.00 raffle tickets for this ride. Tickets may be downloaded from the Chapter's website in the members-only section. Ask your family, friends and co-workers if they would like to purchase a ticket. The drawing will take place on Monday, April 2 at the Chapter Meeting. The winner need not be present to win.

Next Meeting:

Monday, April 2

Guest Speaker: Robin Petgrave

Airmarking

The San Fernando Valley 99s and the Hi-Desert 99s will paint a compass rose at Apple Valley Airport on Saturday, April 14. The Hi-Desert Chapter will be hosting lunch. SFV99s need to arrive at the Apple Valley Airport by 8:30. A small crew will arrive around noon to bring in fresh hands and help with clean up. Airplane rides need to be coordinated and the Hi-Desert 99s need a head count for lunch. If you did not sign up at the March Meeting and you would like to participate, please contact Jennifer Miller as soon as possible.

Welcome New Members!

At the March Meeting, FWP Co-Chairmen Bertie Duffy and Kathy Crawley pinned new FWP Anouchka Van Riel.



Chapter Chairman Jeanne Fenimore and Membership Chairman Mary Glassman



welcomed FWP Dana Schwarzwalter, who recently transferred to our Chapter.

Chapter Fundraiser

The **Macy's Community Shopping Day** is an in-store shopping event and fundraiser for charities in the Sherman Oaks community and will be held on Friday, May 11 at Macy's Sherman Oaks.

The purpose of Community Shopping Day is to raise money for local non-profit organizations through the sale of \$10 tickets that entitles the bearer to an exclusive 10-20% off discount of almost everything at Macy's on top of any sale prices. In addition, customers will enjoy an exciting day filled with food and beverage samples, entertainment, promotional gifts, and the opportunity to win a \$500 shopping spree.

Macy's will coordinate, produce and finance the entire event. Participating organizations will be asked to sell the tickets, retaining 100% of ticket sale proceeds, and to provide volunteers for the day of the event. They ask that each group set a minimum sales goal of 100 tickets.

About three weeks prior to Community Shopping Day, sales associates at Macy's Sherman Oaks will begin to sell tickets to their customers. This money will be divided equally among the organizations that meet all participation criteria.

The SFV99s will be participating in this fundraiser. If you have questions or want tickets, please contact Ruth Logan.

Awards & Installation Luncheon

Save the date of **June 9, 2007** for the SFV99s' Awards and Installation Luncheon.

Award Applications Ready!

Woman Pilot of the Year ~ Rookie Pilot of the Year ~ Schubert Service Award

Applications for these Chapter Awards are now available on the SFV99s website. If you are a member who has been flying or involved in Chapter and aviation activities, please consider applying for the appropriate award. Check the dates of compliance – WPY and Schubert require membership for the last two years, while Rookie requires membership for one year. Completed forms are due by May 15.

Condolences

The SFV99s send condolences to Connie Schurr for the loss of her mother and Fred Bleckman for the loss of his wife. Our thoughts are with you both.

On the Road to Recovery

We are happy to report that Jack Gageby is making good progress after his recent stroke and that Bill Kirhofer is at home and recovering from a recent fall.



Carb Icing – Baby, It’s Cold Inside!

Actually, I suppose I should have saved this article until June, when there is lots of moisture and haze aloft and the weather is not quite so chilly – but still chilly enough when you are airborne for moisture to condensate in some pretty inopportune places. However, carburetor icing is a subject worth discussing at any time of the year, so I will continue and share a few thoughts with you. Those of you who fly jets will most likely not be too interested, but the rest are invited to read on. ☺

As you no doubt learned in ground school, there is a lot that goes on in the carburetor of a light aircraft. Fuel and air are drawn in, swirled around and fed off to however many cylinders you have in an even way. We are also able to control the fuel to air ratio (via the “mixture” knob) so that this mixture is as efficient as possible for the altitude at which we are flying. This technology has been around for quite a long time and is usually very reliable. As with all things that are “reliable”, it is always a good idea to understand the sorts of things that can happen to interfere with that reliability so that when they happen we will not be frantically wondering what’s going on. Being able to recognize the presence of ice in the carburetor and knowing what to do about it are worth a review once in a while.

So how does ice end up in the carburetor, and why, and where? The quick answers are that: 1) there is water in the air going into the carb within a certain temperature range, 2) the water freezes on cold carburetor parts, and 3) it is usually at the venturi and butterfly valve. I will explain further.

The greater the humidity contained in the air, the more likely it is that some of it will end up as carb ice. This is not a guarantee, but the

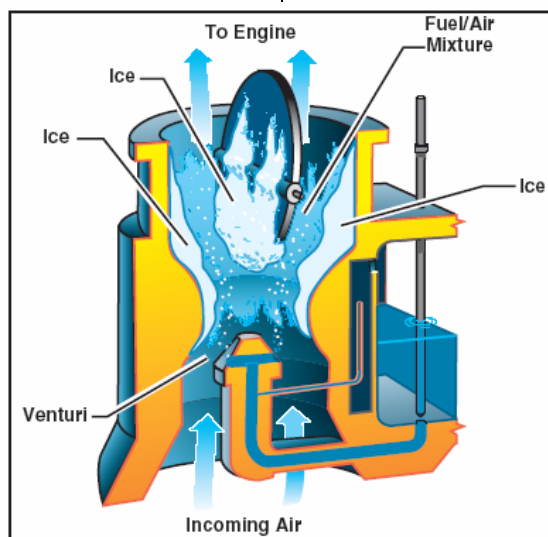
probability goes up. When you get the weather information before your flight, the information is right there for you in the “dew point” number. If the temperature of that air goes below its dew point, you know what will happen – the moisture will condense out in the form of water drops. There do not have to be clouds for this to happen. Humidity and low temps are enough. So now perhaps you will pay a little more attention to the ATIS or AWOS when you

hear temperature and “dew point” information? If they are not so far apart and the ambient temp is above 32 degrees F, you might want to tell yourself to watch for carb icing symptoms. Note that the possibility of carb ice decreases if the air is already colder than 32 degrees. Colder air is already less humid and below about 15 degrees F, any humidity will condense right into ice crystals without sticking to your carburetor.

If it is that cold, let the carburetor STAY cold. If the air actually does contain ice crystals, adding carb heat can CAUSE carb ice by melting the crystals back into water which will quickly freeze again on carburetor surfaces. NOT good!

When the aircraft carburetor is vaporizing fuel, it is cooling the intake air by evaporation. The more fuel that passes thru the carburetor, the more cooling takes place (obviously!). At full throttle, there is much more cooling going on than at idle. The lowered pressure in the venturi also results in air cooling. Your carburetor can get pretty cold as a result. There can be a theoretical air temperature drop of as much as 60-70 degrees F from all these factors combined.

In a carburetor (the one shown is an “updraft” type) there are typically two places where ice forms: in the venturi where the air



pressure is decreased and the fuel introduced, and also down stream of the throttle butterfly. Ice forms near the aircraft carburetor butterfly when water droplets strike parts of the carburetor (typically the butterfly and venturi) that are freezing. Freezing is determined by: the outside air temperature, the temperature drop, and heat absorption from the engine. With the throttle partly closed, such as in a low power descent, you may have a 10" Hg or more pressure drop across the throttle butterfly. At rich mixtures the ambient temperature at which carburetor ice forms is even higher - Lycoming publishes a temperature range of 20 - 90 degrees F for carburetor ice. Hard to believe, isn't it?

So how do you know you have carburetor ice, and what do you do about it? Well, most of the time you do not know, you only suspect that something just is not quite right. What you do about it if you suspect carb ice is (again obviously) apply FULL carburetor heat. Do not mess with partial carb heat unless you have got a carb temp gauge that will indicate whether you are within the temperature range for caution. There will be certain symptoms to recognize, and they usually creep up on you while you are busy doing something else, so a certain amount of vigilance is called for.

You might notice that for a given throttle position you are not developing as much power as you should. In a fixed-pitch airplane like a 152 or 172, the scenario might be as follows: You are flying along and you begin to sense a decrease in RPM. You check the engine tach and sure enough, it is lower than the last time you looked. You pull the carburetor heat knob full out and observe a big drop in RPM followed by an increase – this while the knob is still out. The increase in RPM is the key. What has happened is you have had a build-up of carburetor ice. And you applied heated (less dense) air to the inlet which caused a big drop in RPM. As the ice melts and allows more air into the carburetor throat, the fuel-air mixture becomes more optimum and you get an increase in RPM. When you feel you are no longer in carb icing conditions, you push the carburetor heat knob back in after the RPMs

have stabilized and your RPM then increases to its full potential. In airplanes with constant speed props the propeller governor is going to maintain a constant RPM, so your key is going to be the manifold pressure gauge. MP will fall off, then increase, just like the RPM in the above scenario. In either case, the eventual result of ignoring carburetor ice buildup is that your engine's fuel/air supply will be choked off entirely. I would be willing to bet the ranch and all the cattle that you do not want that to happen unless your aircraft is chocked on the ramp!

Carb ice can form on the ground as well as in the air if the conditions are right. When you are doing your runup and you pull the carb heat knob out, wait briefly to see if there is an RPM increase before you push the knob back in. Your RPM drop is caused because you are replacing filtered cold air with unfiltered warm air. This warm air is less dense and this in turn causes a loss of power (drop in RPM or manifold pressure) because not as much fuel can be burned with it. Note also that this warm air is unfiltered. So do not taxi around with the carb heat knob out and try to choose a place for your runup where you will not be getting a lot of dust.

And finally, why do some aircraft develop carb ice more easily than others? The airflow around various engine configurations is different enough to have conditions that are in some cases rather conducive to the formation of carb ice. In other words, it is another good reason to know the characteristics of the plane you fly. In my Cessna Cardinal for example, which I have had for a LONG time now, I have only had carb ice once and that was in the middle of clouds and rain. But in the Cessna 150 models that I flew while learning, my instructor had me apply carburetor heat every time I made a landing because carb ice was likely to form.

Have a safe flight!

Claudia Ferguson, Safety Chairman
San Fernando Valley 99s
Aviation Safety Counselor
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Calendar of Events

Date	Event	Reference
March 18	Antelope Valley 99s Poker Run	www.freewebs.com/av99s/
March 26	Chapter Board Meeting – 6:30	WHP – Rocky's
April 2	Chapter Meeting – Guest Speaker Dinner in the Main Dining Room	Airtel Hotel -- 7:00 pm as early as 5:30
April 14	Airmarking at Apple Valley	Jennifer Miller
April 21	B-17 Ride / Young Eagles	Syncro – VNY
May 11	Macy's Community Shopping Day Fundraiser	Ruth Logan
May 18-20	Southwest Section Meeting – Santa Maria	www.sws99s.org
June 9	Installation & Awards Luncheon	Michele Albiez
July 20-26	AE Hike – Yosemite	Lynn Meadows, Reno High Sierra Chapter
September 12-16	International Conference – Boulder, CO	www.ninety-nines.org

www.sfv99s.org (San Fernando Valley 99s)
www.sws99s.org (Southwest Section)

www.ninety-nines.org (International)

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