

# THE FLYING TIMES

The Official Newsletter of the Sonoma Skycrafters EAA Chapter 1268

> Sonoma Skypark Airport 21870 Eighth Street East Sonoma, CA 95476

> > **JULY 2018**



RICHARD MARTIN'S DC-3 IS GOING TO OSHKOSH Captain Bob and his cast of Incredibles fly out July 20<sup>th</sup>.

#### **CHAPTER OFFICERS**

President/AE: Robin Tatman, 707-553-2747 Vice President: Walt Eastland, 707-501-8984 Secretary: Nelleke Cooper, 707-938-5587 Treasurer: Bill Wheadon, 707-224-3901 Membership: Bill Wheadon, 707-224-3901 Young Eagles: BK White, 707-996-1335 BOD: Jeanette Woods, 707-996-4563 BOD: Paul Seibert, 707-939-7491 BOD: Marsi Fahraji, 415-686-5254

BOD/Building/Newsletter: Darrel Jones, 707-

996-4494

# FIRST THINGS FIRST

The July meeting is this **Tuesday**, **July 10**. The Board of Directors will meet at 6:00 p.m. Dinner is at 7:00 p.m. after the Board of Directors' meeting, and is \$8.00 per person. Our chef for the month will be none other than that old Scout camp chef who had his taste buds shot off on the rifle range, that little ol' wine-drinker, me. Bet I had you going, didn't I? Well, I'll try to make it up to you all (pronounced y'all) by cooking up some tri-tip

and chicken on the old barbecue, gas tank willing. I may even bring a salad and some cold watermelon. Catherine even volunteered to bake some cookies.

The program is a brief talk about taking the DC-3 to AirVenture at Oshkosh this month.

## PRESIDENT'S/AIR EXPLORER REPORT

Robin will give her report at the meeting.

# EAA 1268 MEMBERSHIP CHAIRMAN AND TREASURER REPORT July 2018

Bill will have his report at the meeting.

# **YOUNG EAGLES**

Young Eagles day was Sunday, July 8. Bk will have his report at the meeting.

As always BK White is looking for volunteer pilots, ground crew and registration helpers for our monthly Young Eagles events. Let him know you will be joining us and helping out by sending him an email to <a href="mailto:eagle1@vom.com">eagle1@vom.com</a> or by calling him at 707-996-1335.

#### MOVIE NIGHT AT SONOMA SKYPARK

Movie night for July is **Saturday**, **July 28 at 6pm in the Sonoma Skypark clubhouse**.

Free admission. Pizza is always available for \$5 per person, including beverages, and complimentary popcorn just to whet your appetite (or spoil it), courtesy of Walt Lewis and his Amazing Real Movie Theater Popcorn Popping Extravaganza Machine.

See you at the movies on Skypark Movie Night, **SATURDAY**, **July 28** at 6 p.m.

#### **DINNER SCHEDULE**

We just have our celebrity chefs for 2018 so let us know if you would like to claim your favorite month for 2019. Contact Robin at <u>robntat@aol.com</u> or 707-553-2747. You can also let me know at <u>wd6bor@vom.com</u> and I'll put you on the roster.

The schedule for this year so far is:

Month	Cooks/Meal			
2018 DINNER SCHEDULE				
JAN	Roland Gangloff			
FEB	Ernie Ganas-Tri-tip			
MAR	Rich & Nelleke Cooper- c. beef			
APR	Ron Price & Frank Russo			
MAY	Ron Willis & John Thomason-			
	road kill			
JUN	Don Booker & Wayne Schake			
JUL	Darrel Jones- meat(s) and salad			
AUG	Robin Tatman			
SEP	Richard Craig & Les Lucas			
OCT	Air Explorers			
NOV	Marsi F., George T. & Howard H.			
DEC	XMAS PARTY			
Standby	Bill & Jan Wheadon			

#### **SPEAKERS**

We are always, continually, everlastingly looking for speakers for our monthly programs.

Send an email to me at <a href="wd6bor@vom.com">wd6bor@vom.com</a> so we can get your program or speaker information into the newsletter.

Month	Speaker/Member/Subject				
	2018 SPEAKER SCHEDULE				
JAN	Katie Greenwood/ Dr. Howard				
JAIN	Donner-Truckee Tahoe				
EED					
FEB	Avery Cruz- Air Academy				
MAR	Dave Alexander				
APR	March AFB 100 <sup>th</sup> Anniversary				
MAY	Family Fun Day Planning				
JUN	Roland Gangloff- Alaska dinos				
JUL	Oshkosh AirVenture				
AUG	Steve Haller- Crissy Field				
SEP					
OCT	Air Academy participants				
NOV					
DEC	XMAS PARTY				

# **2018 EAA 1268 CALENDAR**

Send me any exciting, thrilling, terrifying or just plain fun events you have for the calendar.

DATE	EVENT			
7/8	Young Eagles 9 am			
7/10	1268 Meeting 7 pm			
7/19-	Brodhead Pietenpol Fly-in			
22				
7/23-	EAA AIRVENTURE at Oshkosh			
29				
7/28	Skypark Movie Night			
8/12	Young Eagles 9 am			
8/14	1268 Meeting 7 pm			
8/25	Skypark Movie Night			
9/9	Young Eagles 9 am			
9/11	1268 Meeting 7 pm			
9/22	Skypark Movie Night			
10/9	1268 Meeting 7 pm			
10/14	Young Eagles 9 am			
10/27	Skypark Movie Night			
11/11	Young Eagles 9 am			
11/13	1268 Meeting 7 pm			
11/24	Skypark Movie Night			
12/7	Skypark Xmas Party			
1/1/18	New Years' Day 1st Flight			
Every Saturday Noon to 1:30 pm				
Skypark Hamburgers and Hot Dogs in the				
clubhouse!				

#### **EAA CHAPTER 1268 MINUTES**

EAA 1268 Board of Directors Meeting June 12, 2018

The Board Meeting was called to order by Don Booker at 6:00 pm. prior to arrival of President Robin Tatman

Present were: President Robin Tatman, Treasurer Bill Wheadon, Secretary Nelleke Cooper, Directors Darrel Jones, Paul Siebert and BK White.

Absent: Vice President Walt Eastman and Director Jeanette Woods

Treasurer Bill Wheadon referred to the Treasurer Report being in the May Newsletter.

Darrel reported the funds received at Family Fun Day: Drinks \$275, Bingo \$165, Raffle \$1426 for a total of \$1,816.

Burgers and Hotdogs served according to the food tickets used 420

Funds collected will be for Youth Aviation Scholarships through Air Explorers

Robin reported that the August Speaker will be retired Park Ranger Steve Haller, author and dedicated public servant. Discussion on future speakers – July or November Robert Arnold, grandson of General Hap Arnold. Darrel mentioned possible future speakers, a TSA agent, owner/manager of Oakland FBO and FAA Representatives Glen Gathright and Sarah Hughes. Possible topics, Wings and Inspection of Homebuilts.

Darrel received a donation of a Corvair aircraft converted engine from Pete Kozachik. Pete had intended to use it in a Pietenpol project, which didn't materialize. It will be sold as automobile parts.

Flying Club update: Kristin Gregory at Napa airport has a different approach to their Flying Club. It is for an abbreviated period and starts in June continuing throughout the summer. Robin mentioned that the Air Explorers are very busy as school, sports, work etc. compete for their time. The shorter period may be more beneficial to all involved. Bill Wheadon offered to participate in some of the training. Roland Gangloff has offered to assist Robin leading the Air Explorers and Judy, his wife has experience as a Teen Counselor.

Board Meeting adjourned at 7:00 p.m.

General Meeting called to order by President Robin Tatman at 7:45 p.m.

Robin thanked Wayne and Celia Schake and Don and Ligia Booker for a delicious dinner of Carnitas, 2 kinds of beans, salsa, and chocolate covered ice cream bars. Marsi brought Peets coffee and pudding with whipped cream.

Membership was presented with items discussed at the Board Meeting including Family Fun Day and informed of the donation received by Darrel Jones from Pete Kozachik of a Corvair engine to benefit the Flying Club. Possible value \$5000.

BK White's Young Eagles report for Sunday, June 10. The pilots gave rides to 17 Young Eagles. Pilots - Ron Price, Bill Wheadon, Colin Traynor, Tim Bloodgood and Darrel Jones. John Thomason was on registration and Paul Siebert ground control.

General Membership update on the Flying Club in Napa. Kristin Gregory's program is 6 to 8 weeks during the summer. One day of the week ground school and one day flying to avoid competing with other young people's activities.

Roland Gangloff introduced his wife, Judy, a teen counselor and their mentee Juan Pablo, who is currently an engineering student at Sacramento State University.

Discussion followed on how to get more young people involved in different facets of aviation as there are many career opportunities in the aviation field. One example - in the past Santa Rosa had a Restoration Program in which young people were involved in refurbishing aviation museum airplanes.

Lee Booker said a special Thank You to Ron Price and all the people involved in keeping Skypark in a positive light in the community especially after we did have a fatal accident within the last year.

Speaker for the evening was Roland Gangloff. Roland, a geology and paleontology professor taught at the University of Alaska in Fairbanks and has led several expeditions to the far north in search of dinosaurs. The title of his presentation was: *Umiat Alaska and Arctic dreams: Petroleum, Pilots and Paleontologists*.

Roland's presentation included the history of the oil exploration and the discovery of a big oil field in Umiat, AK by the US Navy in 1944. Umiat is a town in North Slope borough Alaska, only accessible by air or by river. The 5000 ft. runway was built there by the US navy. Umiat is the coldest town in the US and Roland's expedition teams could only stay for a 2 week period in early July as by August 13, the weather got very bad, very quickly. The first dinosaur bones were found in 1983, the beginning of a true dinosaur bonanza. Roland was in charge of the research program from 1987 to 2005 and his research challenged several of the prevailing theories of extinction, migration and ecology.

Well-know Alaskan Bush pilots were Walt Audy, McDonalds and O.J Smith. In 1975 Smith and his wife Elly and sons set up operation, lodging, fuel, weather and flights in Umiat. OJ smith was an exceptional pilot who flew in WWII and was the only pilot to drop his jumpers on the correct coordinates on D day in Normandy. Airplanes used for transport SC-7 Flying Shoe Box, Sky Wagon, C-130's, DC-6 and DC-7's, the Maul etc.

It was a very informative presentation and after numerous questions the meeting was adjourned at 9:10 pm.

Respectfully submitted, Nelleke Cooper, Secretary

Thank you Nelleke for the great job on the minutes!

Send me your news for your newsletter!

I want to thank Leon Scarbrough for sending lots of interesting and valuable stuff for the newsletter. Keep them coming, Leon!

#### Significance of V Speeds



I am not a big proponent of memorizing airspeeds. It can be a risky practice if you fly many different types of aircraft. Most of the important airspeeds can be determined from the airspeed indicator (ASI), though there are a few you probably should commit to memory, or at least keep on a placard.

Eight speeds not found on the ASI are listed in the associated illustration. These are not annotated because they vary with weight and other factors. Yet we are often asked to memorize these. This is an interesting anomaly given they are based on maximum gross weight (MGW)—a condition you should never experience legally once airborne. Let's take a closer look.

## **Rotation Speed** — V<sub>R</sub>

This is one V-speed I wish pilots would never be exposed to. The non-thinking pilot seems to reason that at  $V_R$  the airplane will magically fly and many inappropriately try to force it into doing so by yanking back on the stick at the designated airspeed. A smooth transition from takeoff into the climb portion of fight is essential on an instrument departure. Forcing an airplane into the air before it's ready to fly is anything but smooth— $V_R$  is determined by the airplane. All the pilot needs to do is apply a little backpressure on the yoke to set the appropriate pitch and the plane will fly on its own when sufficient lift is available based on prevailing conditions. In general,  $V_R$  equals 1.15 times  $V_{S1}$  (the bottom of the green arc). The only reason to know  $V_R$  is if you find yourself significantly above this number and still on the tarmac—then it might be time to abort the takeoff. Leaving snow or frost on the wings is an example.

Knowing the general performance numbers for your aircraft and the length of the runway, you should be able to visually determine if the aircraft is not performing as it should.

#### Approach Speed — V<sub>Ref</sub>

Use this speed for a stabilized short final instrument approach. It assumes all maneuvering has

been completed. While not indicated on the ASI, it can be calculated as 1.3 times  $V_{S0}$  (bottom of the white arc). The catch being it is based on MGW, which we will typically never be anywhere near during the landing phase. A general rule of thumb is to reduce  $V_{Ref}$  by half the percentage you are below your MGW.

From the weight and balance completed before departure you know the current relationship to MGW and should be able to estimate the weight reduction from fuel burn. Thus, a reasonable  $V_{\rm Ref}$  can be calculated even before departure. How important is  $V_{\rm Ref}$ ? If you fly just 10 percent over  $V_{\rm Ref}$  you can expect your ground roll to be over 20 percent longer. Another common rule of thumb used is each knot above  $V_{\rm Ref}$  adds another 100 feet to the ground roll. We tend to become complacent about the landing roll flying light general aviation aircraft from runways that are three or four times longer than we need. This can bite us when popping out of the overcast with too much speed and a tailwind.



## Maneuvering Speed — V<sub>A</sub>

Calculated by the manufacturer,  $V_A$  is the speed at which the aircraft will stall before exceeding design maximum G loading. This is a good speed to know when flying in turbulence, something quite common in IMC, since it will help prevent damaging the airframe. Just like  $V_{Ref}$  you can calculate  $V_A$ . It is typically determined by multiplying the flaps-up, power-off stall speed ( $V_{S1}$ —typically the bottom of the green arc) by 1.95 which is the square root of the normal category load limit of 3.8 Gs.

A more conservative thumb rule uses 1.7 times  $V_{S1}$ , which is generally associated with turbulence penetration airspeed,  $V_B$ , not normally specified for general aviation aircraft.  $V_A$  can then be reduced in the same manner as  $V_{Ref}$  is based on weight. If you anticipate turbulence, then create a timeline of what  $V_A$  (or  $V_B$ ) should be over the course of the flight as fuel is consumed.

# Climb Speeds — $V_X$ , $V_Y$

These can be calculated but would require knowing a host of factors related to your aircraft and some complicated math. Best angle of climb  $(V_X)$  is useful for takeoff over an obstacle, an ODP with a challenging climb gradient, flying a delayed missed approach, or need to perform a short field landing.

Best rate of climb  $(V_Y)$  is an airspeed to get you efficiently to the enroute altitude. Further complicating things a bit is the fact that  $V_X$  increases slightly with altitude while  $V_Y$  decreases about a half to one knot per thousand feet until they are equal at an airplane's absolute ceiling. Fortunately, both of these values are normally needed at low altitude so the published figures are good to use if corrected for weight.

#### Best Glide — V<sub>G</sub>

This is one of the most important airspeeds you should know. For most airplanes, it's about halfway between  $V_X$  and  $V_Y$ . Once again, most manufacturers establish the best glide speed at MGW. This means your best glide speed will always be lower than the book value should the need arise to use it.  $V_Y$ ,  $V_X$  and  $V_G$  should all decrease about a half-knot for each 100 pounds under MGW.

Recall that weight itself has no effect on the glide range or ratio, only the proper airspeed to attain the max glide range. However, a tailwind allows you to decrease V<sub>G</sub> further by about one-

third of the tailwind component while a headwind requires an increase in glide speed—typically by one-half the headwind component—to maximize your range.  $V_G$  can also be approximated by keeping the wing cord parallel with the horizon—provided you can see the horizon—not typical on an IFR flight. Another trick using  $V_X$  and  $V_Y$  is to use them to calculate cruise climb ( $V_{CC}$ ) by taking the difference between the two and add it to  $V_Y$ .

Knowing  $V_X$  and  $V_Y$  and using the ASI color coding can allow you to determine all the important airspeeds for instrument flight. Naturally, consult the POH for more specific guidance for your aircraft.

Did you ever wonder why they are called V speeds? The "V" is from the French word 'Vitesse' which means 'speed' or 'rate.'

#### **Some Caveats**

A word of caution when using airspeeds based on the color coding of the ASI. Airplanes manufactured before the mid-1970s had their color coding based on calibrated airspeeds (CAS), and were primarily in mph (some may show knots as a secondary indication). However, airplanes built after this period primarily had their ASIs marked in indicated airspeed (I AS). For most of us, the differences between CAS and IAS will be small but you need to be cognizant of this difference. CAS is important when calculating True Airspeed (TAS) and Equivalent Airspeed (EAS). As always, follow the guidelines specified in your POH for your particular airplane.

Richard Lanning Ph.D. is a graduate of the U.S. Naval Academy and a pilot for more than 30 years. He is an ATP, CAP Check Pilot Examiner, and CFII.

This article originally appeared in the January 2018 issue of IFR Refresher magazine. For more great content like this, subscribe to IFR Refresher!

Frank Schelling's Jenny and crew at the March AFB 100<sup>th</sup> anniversary. Thanks to Rafe for the photo.



# Sonoma Skycrafters

EAA Chapter 1268 358 Patten Street Sonoma, CA 95476

MEMBERSHIP <u>DUES ARE DUE</u> IN JANUARY, AND MEMBERSHIP RUNS FROM JANUARY TO DECEMBER. DUES ARE STILL A MODEST <u>FIFTEEN BUCKS</u>, SO BRING SOME CASH FOR DINNER AND A BIT MORE TO <u>PAY YOUR DUES FOR 2018!</u> SEE YOU THERE!

REMEMBER! THE JULY MEETING OF SONOMA SKYCRAFTERS EAA CHAPTER 1268 IS THIS TUESDAY, JULY 19 AT 7 P.M., AT THE SKYCRAFTER'S CLUBHOUSE HANGAR B-5 AT SONOMA SKYPARK AIRPORT.

DINNER STARTS AT 7 PM, SO DON'T BE LATE!

BOARD OF DIRECTORS MEETING WILL BE 6 P.M. BEFORE THE MEETING

#### SKYCRAFTER MEMBERSHIP

EAA CHAPTER 1268	Membership Dues:	\$15 per year.		
Name:		EMAIL:		
Address:				APT:
City:		State:	ZIP:	
Telephone number, home	work:			
EAA MEMBERSHIP NUMBER:		_EXPIRATION DA	TE:	
AIRCRAFT OWNED OR B	UILDING:			

Please mail your dues to:

Your check should be made payable to:

Bill Wheadon, Treasurer 1021 Stonebridge Drive Napa, CA 94558 **EAA 1268**