

Volume 26: Issue 6 ● July 2011 A Publication of the Pine Mountain Lake Aviation Association

"The Making of the RV" Dick VanGrunsven

July 9, 6:00pm at the McGowans' Hangar (located on the north taxiway)

RV usually means Recreational Vehicle, and while that may be an apt description of the RV line of kit aircraft, they are also the initials of designer and founder of Van's Aircraft, Richard VanGrunsven. Usually known as Dick or "Van," he learned to fly in 1956 at the age of 16. Van has logged



12,000+ hours (mostly in airplanes of his own design) and holds CFI, multiengine and ATP ratings.

Throughout high school and college Van flew a Cub and a Taylorcraft from the 670' grass strip on his parents' farm near Cornelius, OR.

After earning a degree in engineering, Van joined the Air Force where he served as a communications officer because a slight vision problem prevented his acceptance in the pilot training program.

While serving in Michigan, he purchased a homebuilt 65 hp Stits Playboy. It looked sporty, but its performance was poor. He rebuilt it, installing a 125 hp Lycoming engine, bubble canopy, and Hoerner style wingtips. The modified airplane flew much better, but still had a high landing speed, high sink rate, and only moderately good cruise speed. Clearly, horsepower was no longer the problem, so the remaining drawbacks must be the result of an inefficient airframe.

Within a year of returning to civilian life, now employed as a mechanical engineer, Van had designed, built and installed a set of cantilever aluminum wings to replace the strut-braced wood and fabric originals. Renamed the RV-1, the Playboy

flew like a new airplane. The wings were equipped with flaps to provide the short landing performance required for operation from the family farm. It was the beginning of the RV designs.

Van flew the RV-1 from 1965 through 1968, but he was aware that its hybrid heritage limited its performance. He wanted an airplane that was able to fly in and out of any reasonable airstrip, with enough power and maneuverability to do good basic aerobatics, and cruise as fast as possible. He reluctantly sold the RV-1 and began design and construction of a completely original airplane.

The single-seat RV-3 flew in 1971 and was a delightful airplane -- an improvement in every way over the RV-1. Shortly thereafter, he started his own business, providing parts, plans and basic kits for the RV-3.

Van was inundated with requests for a two-seat RV. His answer was the tandem RV-4. On its first flight in August 1979, the RV-4 proved outstanding, better than Van had dared dream. Its top speed was only 10 mph less than a comparably powered RV-3. The handling, low speed control and delightful aileron response that characterized the RV-3 had been retained. The RV-4 found an enthusiastic market.

After the RV-4 was established, Van began work on an airplane to satisfy customers clamoring for a side-by-side design. He next designed the RV-6 and followed it shortly with the tricycle gear RV-6A.

The RV-6/6A became the most successful kit aircraft in history, but Van continued to design new airplanes. Van's introduced the RV-7/7A, the RV-8/8A, the RV-9/9A, the four-seat RV-10, and most recently, the Light Sport RV-12.

Forty years after the first flight of the RV-3, Van continues to lead the company– now the most successful in the field. He commutes to his desk in the engineering office in his original RV-4, or his RV-10, or his new RV-12. Well, almost every day. In the summer, when the soaring conditions are good, he pulls out his all-electric self-launching Antares sailplane, takes a few days off... and goes flying.

We're delighted to welcome Van to Pine Mountain Lake and look forward to great stories about the design and development of the RV line. ◆

President's Message - Wayne Handley

hope you didn't miss our June PMLAA meeting because it was a hoot! Ramona Cox gave us a look inside her wild and crazy adventures traveling around the West in her Cessna 206. Camping alone at backcountry airstrips among the critters and instigating new events at "Burning Man at Black Rock" are old hat for Ramona. She lends new meaning to the term "Free Spirit"!

The gathering was hosted by Carol Simpson, who has also just provided our new roster. A double thanks to Carol. Please note that the roster is for your personal use only.

As you may be aware, Naval Aviation is celebrating its 100 year anniversary this year. What shocked me is the fact that I entered Navy flight school when the Navy had only been in the flying business for 48 years. HOLY COW, does that make a myth out of the old saying, "There are old pilots and bold pilots, but no old, bold pilots?" I now have an identity crisis, what in the hell am I? Back in the day, I was flying jet fighters that were designed in the 40's, built in the 50's and obsolete in the 60's. We didn't need an enemy shooting at us to make it dangerous, but I have to tell you, it was a blast! The intensity of landing on a carrier is second only to pulling the face curtain on a Martin Baker ejection seat, but that is blast of another kind that I don't care to repeat.

Our July 9th meeting featuring Dick VanGrunsven and hosted by the McGowan's is growing. Dick has agreed to do a 3:00pm presentation for our local EAA Chapter 1337 covering the more technical aspects of developing the RV line of aircraft. Our regular meeting will start at 6:00pm and I request that you bring an appetizer, a salad or a dessert, because PMLAA will be barbequing hot dogs and hamburgers for this meeting. The RV owners and builders have been invited, so I'm also looking for hosts for the pilots that wish to RON, although I won't know how many beds we'll need until the week prior.

Back in March I sent my Extra 300 engine in for overhaul. It was to be back in six weeks and cost about \$32,000. Yeah, right! I now expect it to be back in June and suspect that the cost over-run will cover the storage. Do I sound a little sarcastic and frustrated? This is the least that I've flown in my aviation career and I assure you there are "perishable" skills that will need to be retuned and "G" tolerances to build up. On the flip side, my golf handicap has come down and life in general has been a little more stress free. I don't expect my aerobatic instruction business to bounce back immediately, so I might have to mix some fly fishing in with the golf to fill the void.

A safety thought to ponder: "Gravity is a constant, lift is a variable!"

Fly safe! Wayne

PMLAA News

Pormer PML resident Ramona Cox (aka Skychick) was an extremely entertaining speaker at the June meeting. Ramona told stories of backcountry flying adventures to remote unpaved runways in beautiful isolated places in Idaho and Utah. She also showed what we'll see if we go to



Burning Man in Nevada. Lessons learned: bring every chart you can find, extra sleeping bags, duct tape, and a gun!

Congratulations to Janet Gregory who won the 50-50 raffle. ◆

Welcome New Members

James and Patricia Lowe

James is ex-Air Force. He has a Piper PA24-180 and is also an A&P mechanic.

Craig and Audry Prouse

Craig has a Cessna 182 and has been flying for 12 years. He is also instrument rated.

Joe and Norma Powell

Joe is our PML general manager and Norma manages the Groveland post office.

Two Events on July 9th

n addition to our regular PMLAA meeting at 6:00pm, guest speaker Dick VanGrunsven has agreed to give a technical talk for RV pilots, RV builders and friends at 3:00pm at the McGowans' hangar.

For our regular <u>6:00pm</u> event, PMLAA will provide hot dogs and burgers. Please bring an appetizer, salad or dessert, and remember to pack a serving utensil. Margarita Mike will have La Machina running too! ◆

Important Date Change

<u>Airport Day has been changed to September 24</u>. Please update your calendar and prepare to get involved. ◆



Jane's New Art Unveiled Roberta and Grant Naylor hosted a party to unveil Jane Hansen's latest

Jane Hansen's latest commissioned weaving, a beautiful piece depicting an African sunset. ◆

Safety Corner - Mike Gustafson

Cross-wind Landings

ow that summer is finally here we are faced with somewhat sporty winds that are never straight down the runway! All aircraft have what is called a demonstrated crosswind specification. The term "demonstrated" is important; it means the factory sent their best test pilot to find a crosswind. He found a good stiff crosswind and performed a bunch of landings and then wrote the specification. This means that the specification is not the maximum crosswind, just what they could find during the test flight. Also these test pilots are not exactly low time, out of currency newbies. They know the plane and what they are doing. How many of us, on our best day, would consider ourselves the equal of a factory test pilot? I am just saying!

There are two widely used techniques that are to deal with crosswinds: the side slip and the crab-and-kick methods. The side slip is basically where you lower the wing into the wind to stop the cross-drift and use opposite rudder to keep the aircraft aligned with the runway. This method has the attribute of letting you know if you have enough rudder to cancel the amount of crab needed to cancel the crosswind. If the rudder pedal goes to the floor and the plane is still drifting with the wind, it's time to go find another runway better aligned with the wind. The side slip has the unfortunate attribute of forcing you to fly the plane low and slow with the controls in a cross-controlled configuration. Be sure not to let the airspeed get too low in that configuration. A good rule of thumb is to add ½ the crosswind velocity to your approach speed of 1.3 Vso for your particular aircraft.

Typically the crosswind component diminishes as you get closer to the ground, so be prepared to change the amount of wing down and opposite rudder as you get into your landing flair.

The crab-and-kick is where you let the aircraft weather-vane into the wind. As you go into your landing flair you kick out the crab and align the centerline of the aircraft with the centerline of the runway. The key with this method is timing: kick out the crab too soon and you start drifting across the runway, too late and you land with a lot of side load on the landing gear which is hard on tires and the landing gear attach bolts.

Both methods require the pilot to use proper aileron and elevator technique throughout the landing role. In a stiff crosswind, you are not through flying the plane until you put it in the hangar!

An old tail dragger pilot was asked for his crosswind technique, he thought for a moment and then said, "I just land the plane," I don't really know which method I use. The bottom line is, just fly the plane and do what it tells you to do.

Enjoy the great weather, and go find that \$200 hamburger! •

Father's Day Fly-In

Columbia Airport's 45th Annual Father's Day Fly-In is June 18th and 19th. For all the info or to volunteer, please visit the website at www.fathersdayflyin.com or call the Columbia Airport office at 209-533-5685. ◆

Rooms Needed

Do you have a spare bedroom? PMLAA needs to house visiting RV pilots after our July 9th meeting. If you can host a visiting pilot, please contact Wayne Handley: 962-7868.

Congratulations, Tim and Catherine

Congratulations to Tim Donovan and Catherine Santa Maria who recently passed their FAA private pilot knowledge exam. ◆

It's Summer ... Please do not overfly the lake!

May Fly-Out

On May 27th eight hungry souls with four airplanes gathered to fly out to Half Moon Bay for lunch. Due to weather we were unable to reach that destination so we headed for Harris Ranch. We didn't get to the ocean, but everyone enjoyed a great lunch. •

PMLAA OFFICERS - 2011

OFFICERS

President: Wayne Handley 962-7868

VP: Airport Affairs: Marle Hewett 962-0701

VP: Social Affairs: Kathy McConnell 962-5854

Treasurer: Kay Smith 962-6986

Secretary: Charleen Beam 768-6151

COMMITTEE CHAIRS

Property: Ed Peters	962-6267
Multimedia: Ken Codeglia	962-6270
Phil Hickerson	962-6714
Membership: Kay Smith	962-6986
Roster: Carol Simpson	962-0943
Fly-Out Coordinator: Ken Helling	962-7597
Legal Counsel: Renie Leakakos	532-1958
Webmaster: Silvano Gai	962-6378
Speaker Coordinator: Allen Craig	962-6757
Newsletter Editor: Virginia Gustafson	962-6336
Newsletter Publisher: Frank Perry	962-0728
Safety Editor: Norm Peebles	962-1990
Airport Director: Jim Thomas	533-5685

www.pmlaa.org 3



2011 Meeting Calendar (subject to change)

Date	Program	Location
July 9	Dick Van Grunsven: Van's Aircraft	McGowans' hangar
August 6	Dr. Michael Higgins, Flying Adventures	Block party at Barbers and Margraves
September 3	Janice Brown, Solar-powered Aircraft	McGowans' hangar
September 24	AIRPORT DAY! New date	PML Airport Dinner at Gaudentis' hangar
October 29	Stan Stokes, Aviation Artist New date	Muckels' hangar
December 3	PMLAA Holiday Party	Buchners' hangar

PML Aviation Association PO Box 131 Groveland, CA 95321

Next meeting: July 9 RV DAY at McGowans' hangar