

Spirit of Flight

Experimental Aircraft Association Chapter 14: San Diego, CA

November 2022



Ron Shipley prepares to fly a Young Eagle in his Alon Aircoupe at our October 8th Young Eagles Rally. See more photos from the event on page 12.

Table of Contents

EAA Board Election Rules and Ballot

interest 14

Upcoming Events

<u>Page</u>	Topic/Author
2	Chapter Briefing
5	President's MessageTrinidad Lopez
5	Thank You from a Young Eagle
5	Upcoming ProgramsKerry Powell
6	Hunsaker Award Presented to Jonathan Robbins Donna Ryan
6	New Members
7	EFATO – Time for a Change of Direction David Joyce
10	Gone West – Craig Cornford
11	October 15, 2022 Board Meeting
11	Marketplace
12	Young Eagles, October 8, 2022

November 12th—Young Eagles Rally

November 19th—Major Mark Nicholson on Civil Air Patrol

December 10th—Young Eagles Rally

December 17th—Rob Reddig on ATC Outreach

January 14th—Young Eagles Rally

January 21st—Rich Martindell on Collision Avoidance



<u>Chapter Activities:</u> Information provided by Chapter members.

Week ending Oct 1: Another bout of extra warm weather at the beginning of the week, but very pleasant and clear on Saturday. Members were out and about; Trevor Pearson's hangar enjoyed some visits from fellow aviation enthusiasts. Bill Browne provided a filling lunch of macaroni and cheese, gourmet hot dogs, and ice cream bars – definitely hit the spot.

A young lady majoring in aerospace engineering contacted the Chapter regarding an Eagles flight. A Navy officer, who was one of her family's friends, had recommended EAA-14 for Eagles flights as he had enjoyed one. So, she contacted our Chapter email and arranged to come to the field. She brought another friend, also studying engineering. Ryan's Diamond was gassed up and ready, so he took each potential pilot on an Eagles flight. We have had increased interest in Eagle flights – nice addition to our regular Young Eagles program. Billy Lopez continues to spend time working on the Club Piper – he's sure a dedicated and hard worker.



Engineering Students visit EAA-14 for Eagles flights and enjoy ice cream bars. 10/1

Some very sad news. One of our Chapter members, Craig Cornford, was killed in an accident. He had spent months working on his Bushby Mustang II, and his progress was included in the Chapter newsletter. The final touches were the very attractive and unique graphics on his plane.

Week ending Oct 8: Young Eagles Saturday had a great turnout – beautiful, sunny weather. We really appreciate the pilots who provided rides to our eager group of young people: Gregory Bradbury (C172), Chris Constantinides

(Piper Arrow), Chase Franzen (PA20), Roman Hendle (PA28), Jonathan Robbins (Meyers 200), Ron Shipley (Aircoupe), James Sirens (PA28). As always, Trinidad Lopez and his hardworking wife Sharon prepared a muchappreciated meal of hotdogs, hamburgers, fries and fixings for hungry Young Eagles and their parents. Special note: Director Kevin Roche reminded us that EAA 14 was 66 years old on October 5th – the date we received our Chapter Charter. Many changes since 1956 – the biggest being having our own facility.

Week ending Oct 15: Ted Krohne reported he just got back from a 7-day cruise on the St. Lawrence Seaway, traveling from Quebec to Kingston, Canada. While even the premier staterooms were small, he reported that

"the food/booze was decent, and the 49 passengers and crew (mostly Canadian) were pleasant. Cribbage challenges, shuffleboard topside when it got warmer and side trips each day where we would have the opportunity to get off and explore something - villages/forts/mansions/museums-made for a mostly pleasant ride. . . The Lounge/Salon was good sized with a well-stocked bar and fun bartender who knew to bring us extra wine at every meal). The leaves were turning and lovely to look at, the boat travelled over 300 miles and we were raised some 275 feet via 7 sets of locks that we went through."

During the week our normal group of builders were busy as usual. Saturday was a banner day – pancake breakfast, general meeting, and then ice cream and cake to celebrate our Chapter's 66th anniversary. Thanks to all of you for keeping the dream of aviation alive!

Week ending Oct 22: Director Larry Rothrock had suggested having an electric winch to open the large Hangar 1 door to make it easier on members. Ryan located one that wouldn't break the bank and Nigel Worrall and he installed it – look for the new instructions on how to use it. Joe Russo was busy too – he installed a new faucet to fix the leaky one we had – much appreciated.



Nigel Worrel installs our new electric winch on the Hangar 1 Door.

Member Rich Allison is back in town and arranged once again to tie-down his Skyhawk while he is here. He decided to put in a new tie-down pier in with the assistance of Gary List. That's a simple sentence, but a lot of work is involved. Rich sent the following information that outlined the task:

Cleared the overgrown area in the area where the plane will be parked. Blew off and swept off the black top. Dug new tail tie-down pier. Used two bags of concrete, rebar stake in the hole to make the new pier. Leveled the concrete blocks for parking."

It took Rich, Gary, and another friend 3.5 hours each to do this work. On Saturday he and Gary were at it again, cleaning gravel off the black top, pulling weeds and removing debris off the grounds – another 6 hours each. Both Rich and Gary are very energetic chapter members and take seriously their responsibility as renters to help around the Chapter. We really appreciate their hard work and good example.



Gary List and Rich Allison install a new tiedown pier on the flight line to secure Rich's Skyhawk.

During the rest of the week, there were lots of activities going on to get ready for the Open House. On Saturday, some dedicated Chapter members turned up to help spruce up the Chapter, including Mark Albert, Rich Allison, Gert Lundgren, Gary List, Trevor Pearson, Grant Rotunda, Joe Russo and Ryan, along with several others. And three of the Serendipity Club members were busy in Hangar 3 getting their plane and area looking its best: Ben Balanag Jr, Gene



Joe Russo and Gary List sweep the ramp in preparation for the October 29th Open House

Hubbard, and Billy Lopez. Thanks so much for helping out! Pizza was provided for the work crew. A special welcome home to Gene Hubbard who is back from an extended stay in Michigan (and lots of effort working on his new Mini-Max project). Glad to have you back, Gene!

Week ending Oct 29: Besides helping out around the Chapter, Gert Lundgren continues to take advantage of the beautiful flying weather to take to the skies in his RV12iS, making trips to a variety of locations including French Valley. Along with Gert, a number of other individual renters and energetic members took time out of their week, including work parties on Thursday and Friday, to do last minute cleanup for the Open House of Saturday. Jonathan Robbins and his daughter Charlotte were among the busy helpers, along with Rich Allison, Gary List, Jim Mac Kinnon, Don Ramm, and Joe Russo. As always, a very special thank you to Gary List for his tireless efforts in keeping the Chapter looking so presentable for members and guests – he spends hours getting ready for each Young Eagles or General Meeting day. Trinidad Lopez provided pizza for the work crew.

The day of the Open House dawned clear, with blue skies, and perfect weather. And a good crowd showed up at the Chapter to enjoy it. We really appreciate everyone who helped out on the day – we did not get everyone's name and



Aircraft on display at the October 29th Open House.

apologize for not mentioning everyone who helped out – but thank you so much for helping to make the event a success.

The flight line was full, with many members displaying their planes, including Jonathan Robbins/Gary List Myers 200, Ron Shipley's Alon AirCoupe (thanks to Francisco Muñoz and his crew for rolling it out), and Gene Hubbard's Pietenpol and Nieuport..

Thanks to Francisco for doing a lot of outreach to other Chapters about our Open House. Trinidad reported that we had 15 aircraft fly-in, and a total of about 75 people. We had pilots from Palm Springs, Torrance and the even the EAA chapter president from Corona fly in to the event."

Gert Lundgren sat by his RV12iS in Hangar 3 and showed videos of its construction process – he had lots of visitors stop by and ask more about it.

One lady stopped by with her brother who was a former avionics mechanic on B52s and other Air Force big birds. With her were two daughters who plan on leaving their current employment field and becoming airline pilots – they had lots of questions about the process and where to get training.

Kerry Powell made two contributions: first, bringing his guitar and sound equipment and providing music for the event. Second was putting together a slide show that looped continuously throughout the day in Hangar 1 that showed some of the history, activities, members, and planes that have been part of Chapter 14.

Program Director Kerry Powell provides music during lunch at the Open House.



Devin Acklin arrived early to help clean up Hangar 3 and make sure his Long-Eze looked its best. Stephen Larew was hero of the day for stopping by Costco on a Saturday and picking up roast chicken for lunch — a real mark of dedication.

We had other volunteers helping out everywhere, especially with food prep, including Lista Duran, and Chuck Hoffman. Gene Hubbard took over the deboning of the roast chicken and showed the same meticulous care in preparing it for consumption as he does with his airplane – no bones or gristle for our guests. And Trinidad and Sharon Lopez pulled off another big meal. Trinidad reported that we served 25 lbs of Costco roasted chicken, 35 lbs of baby back



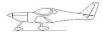
Food preparation at the Open House. Trinidad and Sharon Lopez in the back, along with Gene Hubbard and Lista Duren help serve lunch to the 75 or so attendees.

ribs, baked beans, potato salad, green salad, fries, cake and ice cream. It was a feast.

General Meeting: President Trinidad Lopez opened the meeting and welcomed Chapter members and guests. He then presented the Hunsaker Award for Leadership to Jonathan Robbins. See the article elsewhere in the newsletter about Jonathan's contributions. Due to unforeseen circumstances, our scheduled speaker was unable to come. No matter, member Nigel Worrall graciously stepped up to the plate to fill in and he did an excellent job. You have been reading about the building of his Arion Lightning in the last two issues of our Chapter newsletter. Program Director Kerry Powell brought up the newsletter articles on his laptop to display on our screen and Nigel walked us through the pictures, providing lots more detail about the process than was covered in the newsletter. It was very interesting to both pilots and builders alike – and now we all know that not only can he build an aircraft, but he can give an impromptu presentation as well. Thanks, again, Nigel – great job!



Nigel Worrell gives an impromptu discussion of his ongoing Arion Lightning Classic build project at the October General Meeting





President's Message

Hello Everyone,

October was a busy and exciting month for our Chapter. Our Chapter open

house and fly-in was a great success. We had 15 aircraft from all over the area fly in for the event. Our Chapter display of aircraft and member projects was well received. Afterward everyone enjoyed a roasted chicken and barbecue ribs lunch accompanied with music provided by Chapter member Kerry Powell. October's Young Eagles Day had a large turnout flying almost 40 kids. The volunteers and pilots ran the program flawlessly. The kids and parents were engaged in the activities and enjoying themselves.

This month the Young Eagles will be hosting a private event to celebrate Charlotte's 13th birthday. Happy Birthday, Charlotte, from all your friends at EAA Chapter 14.

The Young Eagles are also hosting a holiday food drive this month. I encourage everyone to participate by bringing food items on the 2nd and 3rd Saturdays of the month. Collection barrels will be set up in Hangar One, the Eagles' Nest, and at the airport terminal building.

Looking ahead to December, the Chapter will be hosting a special holiday luncheon. Chapter members are encouraged to bring their family. Due to the preparations required, this event will be by reservation only. Please sign up early.

In January we will be hosting a free New Year's breakfast on the first Saturday.

As the end of the year draws closer, I want encourage our members to continue to support our Chapter by renewing their membership.

Trinidad Lopez

Thank You from a Young Eagle

The Chapter received the following email from an appreciative Young Eagle. Though this one is addressed to Ron Shipley, the feeling behind it no doubt goes for many of the young people who benefit from our Young Eagles program.

"I wanted to write you a thank you letter. Thank you so much for letting me fly and take control of your beautiful 1966 aircraft. I had such an amazing time up in the air. I am moving to Reno, Nevada in 9 months and hope to go to flight school there. Your plane and yourself have opened up a new chapter in my life. Thank you so, so much."



Kerry Powell, EAA-14 Program Director

Program summaries are taken from descriptions on faasafety.gov

November 19: Major Mark Nicholson will speak about the Civil Air Patrol

Maj. Mark Nicholson serves as a command pilot for the Civil Air Patrol with a focus on Search and Rescue procedures. As the Deputy Commander of the San Diego area, he works with six squadron commanders to coordinate training, search and rescue activities, cadet programs and aerospace education.

Safety is paramount. Volunteers who participate in CAP activities receive continuous training and fly numerous Practice Missions to hone their Search and Rescue skills. Although the search and rescue missions can be hazardous CAP mitigates this high risk activity through continuous training with classroom sessions both on the ground and in the air.

To these volunteer activities he brings experience as the current Chief Pilot for Palomar Aviation, a Cirrus training center in north San Diego. He leads instructors and guides the training experiences in all aspects of flight operations with a focus on safety and standardized instruction.

Mark earned his Pilot Certificate in 1983 and has over 2,800 hours in general aviation aircraft. He's a member of the National Association of Flight Instructors and focused on teaching the skills required for Aviation Decision Making (ADM). With a doctorate in Industrial/Organizational Psychology, Mark is also a lecturer of Management studies at San Diego State University.

December 17: Rob Reddeg from the SoCal Tracon, speaking on ATC pilot outreach.

Rob works for the SoCal Tracon and has been a very active ATC spokesperson all around Southern California. He has led past Operation Rain Check visits at the TRACON, and has been the featured speaker at many pilot groups in the WP09 (San Diego) and other regions. He has an engaging speaking style and his Q & A sessions at the end are extremely valuable and popular.

Join us to hear Rob help you unravel the mysteries of working with ATC and help them give you better service. Rob will also be able to update us about staffing at the TRACON during the pandemic.

They really are here to help!

January 21: Rich Martindell, VP at King Schools and retired Air Force will speak about Collision Avoidance.

Hunsaker Award Presented to Jonathan Robbins

By: Donna Ryan

The Hunsaker Award was established in 1995 to recognize outstanding leadership in several critical areas impacting EAA Chapter 14. This isn't just for a one-time burst of leadership, although we always appreciate that. Instead it is for on-going demonstration of leadership: seeing a problem, finding a solution, then implementing it for the overall betterment of the Chapter. On October 15, Chapter President Trinidad Lopez presented the Award to Jonathan Robbins.

Many of you know Jonathan as a long-time Young Eagles pilot who is always present on Young Eagles Saturdays to fly kids – one time he even made 9 flights when we had a particularly heavy turnout. But many of you may not know about all the unseen, but very important work he has done for the Chapter.

Here are just a few examples:

- ➤ Made the first significant upgrade to our Chapter's wi-fi system in years, extending good wifi through Hangar 1, the Eagles Nest and into Hangar 3.
- ➤ Helped Gary List identify issues and fixes for our upgraded simulator and he even made the flights up to northern California with Gary to deliver it and pick it up from the vendor.
- ➤ When we needed to get a new internet provider within just a few days, he switched us to a new carrier for the same price as previously with more data per month a real miracle these days. But to accomplish it, he had to wait on the phone and deal with the new provider for over four hours so add perseverance to his qualities.
- ➤ When we had the same emergency need to get a new phone carrier when AT&T wished to discontinue our land line service, he not only did that, but upgraded up to a new VOIP phone with Google voice which was much cheaper (free) and more appropriate for our Chapter.
- At the same time, we had to do something about our alarm system connection because of all the internet/phone changes. He worked closely with our security monitoring system to set up the new internet-based security system, and ran the Ethernet lines and programmed the router at the Chapter to prepare for the upgrade.
- Besides all this, he serves as a Chapter Director, as a speaker at the Chapter (twice), a Young Eagle pilot flying almost every monthly event, and does cleanup around the Chapter prior to our Saturdays meetings.

The Chapter is very fortunate for have Jonathan as a member. We have certainly benefited from his knowledge, his skillset, and willingness to help.

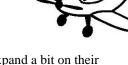


Jonathan Robbins displays the Ben Hunsaker Award for Leadership.

New Members

Donna Ryan

Welcome to our new members. The information below comes from their membership application. Some people just



include the essentials; others expand a bit on their experience and we always appreciate that.

Look for them at the next meeting, introduce yourself and get to know them better. We very much appreciate their support.

Brad Alberts holds the following ratings: ATP/CFI-I, MEI. He owns an aircraft located at KMYF and has an extensive background as an airline captain. He states he has computer skills—always valuable these days.

Tim Johnston has the following rating:

commercial/Multi/Instrument. He also is a Part 107 remote pilot. He currently has his Rutan Varieze parked at the chapter – very nice addition to our experimental aircraft. He also says he is a good cook and he is interested in giving Young Eagles Flights – two really appreciated skills at the Chapter – eat and fly – a perfect combination!

Albert Padro joined our Chapter because of his interest in sport piloting and aircraft mechanics. He lists his skills as amateur radio and computer tech – both useful skills for any pilot. Thanks, Albert for joining!

Francisco Sanchez has a Kitfox Classic IV 1200. He is interested in flying, gold prospecting, fishing, and metal detecting – wide range of interests!

EFATO - Time for a Change of Direction?

by David Joyce

(Note by editor: This article was published in the Devon Strut newsletter, our twin chapter in England, several months ago. They had published it with acknowledgements to the Gloster Strut Newsletter. The article has been lightly edited from the original).

Two tragic aircraft incidents have really stuck in my mind – both fatalities following an Engine Failure After Take Off (EFATO). One of these was of a long-term friend with over 1,100 hrs flying his own Europa aircraft from his home strip, (which has very bleak land ahead prospects). He appears to have had partial engine failure at around 150 feet, was seen to initiate a turn and spin to his death.

The other was of an instructor flying a Tiger Moth from his home airfield. This happened to have been witnessed by another friend of mine who describes an identical sequence of events. So the question that troubled me was: "Why would two very experienced pilots flying familiar aircraft in familiar circumstances initiate a turn without sufficient airspeed following an engine failure at a low level?"

After chewing over this question for some time, I decided that, in this area of deeply held beliefs, a bit of research into the facts of EFATO would not go amiss. So, I have done my best to find answers or at least some better insight into the matter by going through the United Kingdom (UK) Air Accidents Investigation Branch (AAIB) reports of all EFATO incidents reported in the last twenty years.

In analysis of all EFATO incidents reported by UK AAIB I used the search facility on the AAIB website for the phrase 'Engine Failure After Take Off' in the 'General Aviation, Fixed Wing' category for the last twenty years (Jan 1998 – Dec 2017). The AAIB search engine is not especially sophisticated and it threw up a bit over 1000 items which included all manner of failures not related to EFATO. But going methodically through these revealed 88 cases of EFATO which I defined as either complete or partial engine failure at or below 1000 feet during the take off or go around phase of flight. I recorded aircraft type and registration, height of failure, complete or partial, licence and hours experience of pilot, whether the pilot landed ahead give or take 30 degrees or turned, degree of damage to plane and degree of injury to the pilot/passenger, (and I recorded it as a fatal crash if at least one person was killed). The main findings were as follows:

Table 1: Partial or Complete Engine Failure

	Partial	Complete
Number	49 (56%)	39 (44 %)
Fatal Crashes	9	6
Mortality rate	18.4%	15.4%



There are more partial compared with complete engine failures and the mortality rate was slightly higher for partial failure, although the difference is not statistically significant.

Table 2: Turn Back or Land Ahead					
Turned Back Land Ahead					
Total	46 (52%)	42 (48%)			
Fatal Crashes	13	2			
Mortality rate	28%	4.8%			

Slightly more pilots turned back than landed ahead and the crude mortality rate was much higher in those turning back. Superficially this seems to justify the standard teaching of always landing ahead, but one cannot sensibly make that conclusion on the basis of these figures. It is very possible, indeed highly probable, that the situation ahead and around was more daunting (and therefore dangerous) for those who turned, so that we are not comparing like with like. There is also the possibility that a number of those turning back, possibly a large number, made it safely to the airfield and therefore did not come to the attention of the AAIB. The most important point for me is that over half of pilots in fact went against standard teaching and did turn back.

Table 3: Partial/Complete Engine Failure & Turned/Land Ahead - *No. of a/c and (mortality rate)*

Turneu/Land Arieau - No. of a/c ana (mortality rate)				
	Turned Back	Landed Ahead		
Partial Failure	32 (28%)	17 (Nil)		
Complete Failure	14 (29%)	25 (8%)		

With partial failure nearly twice as many turned back as landed ahead, whereas with complete failure the numbers were roughly equal. It seems clear (and logical) that partial engine failure tempts the pilot to think that he is more likely to be able to return to the airfield.

Table 4: Height of Engine Failure vs Decision & Mortality

No. of a/c and (Mortality Rate)

	100 ft or less	101-500 ft	> 500 ft
Turn Back	9 (33%)	31 (26 %)	7 (14 %)
Land Ahead	23 (Nil)	16 (13%)	2 (Nil)

Not surprisingly a greater proportion turned back at the greater heights. The difference in mortality of those experiencing failure at 100 ft or less is striking, but probably misleading. Clearly no-one is going to want to turn at such a low level. The land ahead group mostly landed on the runway, whereas those turning were in all probability

presented with an impossible prospect ahead having already gone beyond the point where they could land ahead on the runway.

Table 5:						
Number of Fatal Cases at Different Failure Heights						
Height up to	100'	200'	300'	400'	500'	600'
Complete	1	3	2	0	0	0
Partial	3	2	0	3	0	1

Three quarters of the deaths were associated with engine failure at 300 ft or less and there were none above 600 ft.

Table 6:						
Aircraft	Aircraft Damage and Pilot Injury vs. Decision					
Damage to Pla	ane					
	Slight Moderate Write Off					
Turned	17%	39%	44%			
Land Ahead	17 %	50%	33%			
Injury to Pilot						
	None	Moderate	Serious	Death		
Turned	52%	13%	7%	28%		
Land ahead	64%	26%	5%	5%		

Damage to the plane was slightly greater in those turning and there were slightly more serious injuries and significantly more deaths in those turning. The proportion of pilots with no injuries at all was of some comfort. Caution is again necessary in relation to the injury and mortality rates for landing ahead or turning because of the likelihood that the circumstances and landing possibilities were less favourable for the turn back group.

Table 7: Experience (Hours logged) vs % Planes Written Off and Mortality

Hours Logged	< 400hrs	400-999hrs	1000+ hrs
Planes written	29%	54%	37%
off			
Mortality Rate	9.7%	25%	17.8%

There was a clear pattern of both major damage to the plane and deaths being more common in those with hours in the mid range of 400-1000 hrs.

Table 8: Overall Mortality Rates Related to Age Groups

Pilot age	< 40 yrs	40 - 59 yrs	60+ yrs
Number	20	36	32
Fatal events	1 (5%)	7 (19.4%)	7 (21.9%)

There was a heavy concentration of pilots in the 50-70 years age range, and the pattern of deaths broadly mirrored the age distribution. The differences between the 40-59 and the 60+ age groups is not statistically significant. However, without figures for the age distribution of GA pilots in general it is difficult to make much of this. It may be that the younger age group are predominantly flying club planes whereas more of the older groups are flying their own. Old age (that is post retirement age) does not seem to be a major factor in risk.

Pilot's License: There were 5 with ATPL, 12 with CPL, 70 with PPL or NPPL and one student. There were 14 deaths in

the PPL/NPPL group (20%), one in the CPLs (9%) and none in the ATPL or student groups. The numbers are too low in the groups other than the PPLs to draw any significant conclusions.

Why did they turn? The answer to this question is rarely provided in the AAIB reports, but in a few there are vivid accounts from the pilot of how impossible/awful things looked ahead with trees, cliffs or stone walls. Two of the planes taking off from seaside airports ditched with pilot and crew surviving. Another pilot died when (with the wisdom of hindsight) he should have chosen to fly ahead and ditch.

Conclusions: There are two things which stand out in this study for me:

Firstly, in all of the fatalities and a good number of the survivors it is clear that the pilot lost sight of maintaining adequate flying speed.

Secondly, a high proportion of pilots of all levels of experience and training turned when they experienced an EFATO, thus undertaking what was almost certainly a totally unpractised manoeuvre. It is clear that my friend and the instructor were not unusual in their decision to start turning – they were in fact part of a modest majority of those confronted with an EFATO. This study of twenty years of UK occurrences makes it untenable to claim that it is just the occasional oddball or bad pilot who decides to turn. Turning back not only goes directly against standard teaching, but also goes against standard practice (or lack of it!). In my training, skills testing, revalidation flights and what I hear of others, it was the norm to do a practice EFATO from a couple of hundred feet or so with the explicit expectation that you will land/crash ahead within a narrow sector, with key learning points to get the nose down and remember to switch off the electrics. I have never heard of any of my friends ever being encouraged to practise any sort of turn back manoeuvre from any height, and very few have any idea of what height they need to contemplate turning back. So what can we do to prevent such a thing happening to us?

Ideally, of course, we should prevent an EFATO happening and this certainly emphasizes the need to have your plane in good mechanical order. There were several cases in this series where it was apparent that the pilot was flying with an engine that he knew was not working properly or with some non-approved modification. But I leave mechanical considerations for others to pursue and will concentrate on preventing the serious consequences of such an occurrence by addressing the two issues highlighted above. In all of the fatalities it was pretty clear that the pilot lost sight of speed control and was not brought to his senses by the whinging of a standard stall warner squeaking somewhere outside his (probably noise cancelling) headset. This is understandable in the light of psychological studies which show that in high stress situations the mind will focus extremely narrowly on a single issue to the exclusion of all else, as if saying, "Go away, leave me alone, I am not listening, I have to find a landing site." With the plane still trimmed nose up and very tense arms on the controls it is all too easy to see how speed decays. What is needed here is some system loud and

forceful enough to cut through that narrow focus when speed decays dangerously.

In Permit Aircraft it is now fairly common for aircraft to be fitted with a SmartAss or an EFIS with a low speed/residual lift system generally based on Angle of Attack and all producing forceful spoken messages through the pilot's headset, and mostly accompanied by very noticeable visual warnings. There would be clear advantages for such systems to be retrofitted to all aircraft, whether certified or flying on a Permit.

The second issue is more complex and clearly controversial, but I believe this is where we can all go a long way to avoid ourselves becoming a statistic. With the evidence from the AAIB presented above, all of us should accept that we (or our students) may find ourselves in an EFATO situation where we feel that we have no option but to turn. It follows from this, that we should know how best to turn and have practised it. In an informal survey of pilot friends and acquaintances in the area, I asked them what is the best way (in terms of minimising height loss,) to turn if they find they have to. They had widely varying views, but none (out of about 30) came up with the answer that in order to turn with minimal height loss, one should turn with 45 degrees bank, (no less and certainly no more) and as slowly as you safely can. Yet this has been amply demonstrated 20 odd years ago by a very smart professor from the US Naval Academy, David F. Rogers (Google: 'the possible impossible turn'). There is another likely advantage of choosing a 45 degree bank. Most pilots who have not had extensive gliding experience will probably have fairly rudimentary rudder coordination skills and will tend to over rudder a shallow banked turn and under rudder a steep turn, offering a bit of spin protection. The large majority of my friends felt the best way to turn back would be to use a fairly shallow bank angle – generally 20 or 30 degrees, and virtually all chose best glide speed. Such a turn involves a large turn radius and loses up to twice as much height as a 45 degree bank slow turn. For my own aeroplane the figures are shown below. Several of my friends who have put it to the test in their own aeroplanes confirm this sort of difference. It should not need much thought to realise that embarking on a turn from below 600 ft in a manner destined to lose 700 ft is a recipe for disaster!

Table 9: Loss of Height performing gliding "P" turn in various configurations

i turn in various configurations					
Airspeed	Bank Angle	Bank angle			
	30 Degrees	45 degrees			
70 Kts	680 ft	480 ft			

Points worth making about this are:

a) There appears is a clear benefit to banking at 45 degrees. For my plane there is no benefit in having flaps down, except that this gives a higher margin over stall and also being of course in landing configuration with less energy of impact. The Europa Monowheel has linked flaps and undercarriage and flaps are always fully up or fully down and when down are accompanied by the undercarriage with its appreciable extra drag. Planes with flaps

- independent of undercarriage are likely to find a clear benefit flying with Take Off or Landing flap.
- b) These figures are for a 'P' turn, turning 225 degrees to point 45 degrees beyond the runway centre line and then doing a turn reversal and turning 45 degrees in the other direction to regain the runway centre line. It is relatively difficult to do this in a strictly repeatable way and readers may find it more reliable to experiment measuring height loss in a complete 360 turn over some linear feature.
- c) It is generally reckoned that a stopped propeller causes less drag than a windmilling one, so real EFATO performance should be better than engine idling practise gives. My own Woodcomp SR3000 W propeller will not stop windmilling with engine off and at speeds down to 50kts so I cannot prove the theory.
- d) All of the above tests were done with the CS prop in Climb mode, fully fine, which would be the likely case in any EFATO. Glide performance is actually appreciably better with the propeller fully coarse but it is totally inappropriate Europa Monowheel G-XSDJ 60kts 460 ft. 400 ft. 55kts gear & flaps down 490ft. 400Ft to contemplate considering playing with propeller pitch in the overstressed, overworked circumstances of an EFATO. My own plane has measured engine idling glide ratio of 1-10.3 in fine pitch and 1-13 in coarse. It might be valuable to be aware of this if you have an engine failure at height in mid Channel but not with an EFATO.

Apart from the choice of a bank angle of 45 degrees there is no universal answer to what is the optimum speed or configuration to turn; it depends entirely on the plane's characteristics and also on the pilot's abilities, but probably 10 kts above stall speed is a reasonable starting point. It is, of course, critical to remember that your stall speed at 45 degrees is increased by a factor of 1.189 or by 20% in round terms, and to a lesser extent by having the plane heavily loaded. You need to discover what you are comfortable with for yourself.

Height loss in a 'P' turn that could get you back to land on the reciprocal of your take off runway is somewhat less than the height loss produced by a 360 degree turn. It is a pretty straightforward manoeuvre to go to a safe height, find a recognizable linear feature and measure your height loss doing a 360 degree turn in different configurations. Turning after an EFATO does not, of course, demand a complete 180 reversal, there may be a perfectly landable area off to one side. Land ahead? There is actually a nice golf course 90 degrees left!

It seems to me that it is high time that the aviation world accepts that real, sane pilots actually do turn back more often than not after an engine failure and practicing such a manoeuvre should become part of the training of every pilot. In the gliding movement, student pilots have to learn to deal with practice cable breaks at different heights before they are allowed to go solo and this will include making the decision of whether they are low enough and have enough airfield to land ahead or whether they should turn and do an "S" turn or a mini circuit. Compulsory annual practice of

these manoeuvres seems to have reduced the mortality rate from actual cable breaks to very small proportions.

It seems evident that if you can teach every pre solo gliding pilot to cope with deciding to land ahead or do a turn, then it should be possible to do this in fixed wing powered aircraft and that it should become a stand part of training for a PPL, revalidation flights, and conscientious pilots' practice.

Finally, let met say that I am absolutely <u>not</u> advocating turning as the standard response to an EFATO, but that we should all be prepared to if we feel forced to turn. I suggest that the protocol for an EFATO should be rewritten along the following lines:

- > Put the nose down and ensure adequate flying speed.
- Look for a reasonable landing area ahead within a narrow sector and prepare to land there, adapting landing configuration and speed. (And a reasonable area is one that doesn't look likely to kill you; don't even think about the plane's paint work!)
- Accept that you may find no such suitable area ahead and that you may feel forced to turn (preferably into any cross wind).
- Adopt your well-practiced means of turning, keeping a very close eye on airspeed.
- And all the usual things, but above all, keep the aeroplane flying, lower gear and flaps, if not already down, switches off, brace position, trying to restart if enough height (unlikely, emergency call, etc.

Note: the following comment was later received by the Devon Strut newsletter editor from Devon Strut member Gordon Cameron:

David' Joyce's analysis of EFATO was a good report but unless the pilot survives, you don't necessarily know whether he turned back or not. My colleague in our aircraft company some years ago had an EFATO at 30 feet after which one wing stalled before he had time to recover with rudder. It looked like he had tried to turn back, but he didn't have enough height to recover speed. He survived the crash and was able to explain what had happened.



Gone West - Craig Cornford

On October 6, the Chapter received the sad news that member Craig Cornford had died in an accident. Many of you remember back in December of 2019 when Craig



brought his Bushby Mustang II to tie it down at the Chapter. He had built the aircraft at home and was finally ready to do the final assembly and installations. He spent every weekend working on it and by May of 2020, he was already taxiing it around the Chapter and then flying it off to Nevada or Arizona. He decided to paint it and didn't just stop at a nice paint job – he added beautiful vinyl graphics as well. Shown below are some before and after shots. He moved his plane to Gillespie in May of this year.



Craig Cornfield does preparation for painting his Bushby Mustang II in Hangar 3.



Craig's completed Mustang II with vinyl graphics applied

Spirit of Flight - Page 10



October 15, 2022 Board Meeting

Donna Ryan, Chapter 14 Secretary

Provisional Minutes – Pending Board Approval

The Board meeting was held on Saturday, October 15, 2022 beginning at 11:45 pm.

Directors and officers present were: Jimmy Kennedy, Ted Krohne, Trinidad Lopez, Kerry Powell, Jonathan Robbins, Kevin Roche, Larry Rothrock, Donna Ryan, Ron Shipley, Alan Sparkes, Stu Strebig. Directors and officers absent were: Gene Hubbard, Ashley Lopez, Francisco Muñoz. Guests: Gert Lundgren, Ryan

Board Decisions

(Subject, moved by, seconded by, pass/fail)

- August 2022 Minutes reviewed and approved. Larry Rothrock/Alan Sparkes: passed.
- Locate and install a different opening system for the Hangar 1 door. Kerry Powell/Stu Strebig: passed.
- Motion to adjourn. Jonathan Robbins/Ted Krohne: passed.

Old Business

<u>Lease Option</u>: **Trinidad Lopez** discussed upcoming meeting with City and the items of discussion.

New Business

<u>Hangar Material Inspection</u>: **Alan Sparkes** inquired about what all is necessary to do to erect the hangar we had previously purchased. The Board discussed options. **Jimmy Kennedy** will provide the full set of plans that came with the hangar. **Trinidad Lopez** requested that an up-to-date inventory be made of all the material that came with the hangar.

Open House: Open House to welcome the community, FBOs, the Tower, and our members is scheduled for October 29, 2022. **Trinidad Lopez** discussed planned activities (swap meet in the morning, BBQ, project and aircraft display, possible fly-in, Young Eagles display. **Donna Ryan** will obtain a flyer for the Open House, send it to **Kerry Powell** to have printed, and copies will then be made available in Hangar 1 to pass out (Airport Ops, tower, FBOs, libraries, schools, other airports etc.). **Donna Ryan** will send email blast to all members asking for volunteers before and after the Open House and to all renters asking them to display aircraft and projects. She will also notify the tower and Airport Operations about the Open House. **Kerry Powell** will register us for the local Reader magazine so we can put notices in for the future.

Membership Growth: **Donna Ryan** will send letter to selected past members encouraging them to rejoin, and will request a list from EAA National of EAA National members in our area.

Opener for Hangar 1 door: **Larry Rothrock** discussed the need for a different type of system to open the large Hangar 1 door. A motion was passed to research and install one.

<u>Chapter Party</u>: The Board discussed different options for a Chapter Party (Holiday Party or beginning of year party, hold in December or in January, hold at Chapter or at Casa Machado). **Trinidad Lopez** will contact Casa Machado to identify current prices for buffet.

<u>Fly-in/Camp-out</u>: The Board discussed possible locations for a Fly-in/Camp-out, including Borrego, Ocotillo Wells, Chiriaco Summit, our Chapter and other possibilities. We need to identify all preparation steps needed for a successful event.

<u>Rising Costs</u>: The Board discussed rising prices and the need to begin setting aside additional reserve funds for upcoming maintenance and possible expansion. Cost of utilities, food etc. has all risen, but hangar rents have not risen for years. Need to discuss this at the next Board Meeting.

Items Identified During the Meeting to be discussed next month

Membership growth, lease update, price increases, flyout/campout, Chapter party.

The meeting was adjourned at 1:13 pm.

Submitted by Donna Ryan

Marketplace



For Sale: Falco parts and plans. Donated to EAA Chapter 14. Asking \$1,000 or make an offer. Text Ryan at 858-229-4875 for more information.



For Sale: Brand new RV-10 empennage. Purchased for \$4,500 in February 2021. All parts, tools, and paperwork available; can be registered at Vans. Donated to EAA Chapter 14. Selling for \$1,500. Text Ryan at 858-229-4875 for more information and pictures.







EAA Chapter 14 Election Rules

Eligibility:

Chapter members of record in good standing (i.e. dues up-to-date through the current year as of November 1.) EAA National and our Chapter bylaws require that <u>Chapter members must be EAA National members to vote in Chapter elections</u>. The membership chairman will compile a roster of eligible members prior to the election.

By casting a Chapter ballot, members are attesting that they are current EAA National members.

Voting Procedure:

Ballots received by paper mail up to November 17, 2022 will be accepted. An email option may also be available; separate instructions on this option will be provided by email.

When voting by mail, include your name in the return address. Send your ballot to:

EAA Chapter 14 Election Ballot 1409 Continental Street San Diego, CA 92154-5707

Kerry Powell

[]

You may also place your ballot in the white mailbox outside of Hangar 1. Place your ballot in an envelope and write your name and address on the outside of the envelope.

Before the meeting, the Secretary or designated representative will validate mail-in or drop-in ballots against the voter roster by matching the name and return address of unopened ballots, checking them off on the roster.

Members may vote in person by bringing their completed ballot to the election table and being validated by name against the roster before placing their ballot in the ballot box. The election table will be available from approximately 10:00 to 11:30 for in-person voting. Members wishing to vote in person but who must leave before the election table is open may leave their sealed ballots with the Secretary or designated representative to be counted as mail-in votes. The Secretary or designated representative will open the envelopes and place the ballots in the ballot box prior to counting of votes.

Vote for both Officers and Directors. Use blank spaces for write-in candidates. Write legibly and mark your ballot clearly. <u>Ballots with more than 18 votes in total will be invalidated</u>. Vote only once!! Thanks for voting and supporting your Chapter.

BALLOT for OFFICERS and BOARD of DIRECTORS

OFFICERS (If you want to vote for someone else as an officer, print it in the write-in space.) [] Trinidad Lopez (for President) Larry Rothrock (for Vice President) [] Donna Ryan (for Secretary)

Bon Shipley (for Treasurer) [] [] Ron Shipley (for Treasurer) DIRECTORS (vote for up to 14 additional directors. To add a name, print it in the write-in space.) [] Gene Hubbard [] Jonathan Robbins Jimmy Kennedy [] Kevin Roche [] [] Alan Sparkes [] Ted Krohne [] Ashley Lopez [] Stu Strebig Gert Lundgren [] Nigel Worrall [] [] Francisco Muñoz

November 2022

Facebook

http://www.facebook.com/pages/EAA-Chapter-14-San-Diego-CA/134162329986593

Chapter Website http://www.eaa14.org

EAA Chapter 14 Memberships

Applications are available at our Brown Field hangars and on our website.

General Chapter Information:

Donna Ryan (Chapter Secretary) (858) 273-4051. Leave voice mail or text. eaa14contact@gmail.com

Director Name	Phone #	Email
Gene Hubbard	(858) 722-1918	nx421gn@gmail.com
Jimmy Kennedy	(619) 405-7266	jk@kencomgraphics.com
Ted Krohne	(619) 435-8940	tedkrohne@hotmail.com
Ashley Lopez	(619) 277-8518	ashleylopez8518@gmail.com
Trinidad Lopez	(619) 661-7117	bajaassy@gmail.com
Francisco Munoz	(619) 254-3344	fjmunozpilot@gmail.com
Kerry Powell	(760) 613-4389	kgpowell@roadrunner.com
Jonathan Robbins	(619) 572-5087	snibbornoj@gmail.com
Kevin Roche	(619) 249-1285	tkevinr@rocketmail.com
Larry Rothrock	(619) 507-4455	rothrock@znet.com
Donna Ryan	(858) 273-4051	rryan@san.rr.com
Ron Shipley	(619) 857-5201	ronaldshipley@cox.net
Alan Sparkes	(619) 463-2648	alspa700@mac.com
Stu Strebig	(619) 346-9788	trail2texas@yahoo.com

EAA Chapter 14 (with answer machine) (619) 661-6520

Chapter Events

Open House at the Brown Field hangars: every Saturday from 10:00 am to 2:00 pm.

Pancake Breakfast: 7:30-9:30 am, third Saturday of each month

General Meeting: 10:00 am, third Saturday of each month

Hangar Phone:

619-661-6520

Experimental Aircraft Association San Diego Chapter 14 1409 Continental Street San Diego, Ca 92154-5707