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F5J & E-RES POSTALS (please open attachment in body of email for spreadsheets).

"Cant see the weather changing with not many days left in September."

"The water table is plus 20mm over most of the local field. Not very conducive to the F5J models."

"My Postal score for September is ZERO! It rains most nights and the water table was almost ground level the sunny mornings and almost nightly rain has kept the field wet and muddy."

I hope October improves though that is not what is scheduled. Workshop weather only"

"Weather has been atrocious"

"Rivers are up but not threatening any homes I am aware."

"Wangaratta means where two rivers meet. And they do just on the left of the north bridge into town. Local park is flooded." It seems that all I have is quotes this month, very little flying.

The few results received did not change anything with regards to the order of things in both events. Please open the two spreadsheets for a gander at the listings

EMF

Wangaratta field
under water.

From John Quigley

Monthly Glider Postal events , Reports, Promo's and other stuff from the **Australian Electric Flight Association.** # 4. Sept 2022

POSTAL 2023

With a grand total of five entries in the Postals this month things are not looking too bright for this concept— or this magazine that exists to support it. Even allowing for climate and Covid it's a poor effort.

Last issue we reported on a new proposal for Postals 2023. An initiative from Gerry Carter of Glider Score to use his software, in the field to record a number of flights and register them for your monthly Postal. A secondary benefit of this concept is to give you a raw score total of your monthly flights as a benchmark to aim for and exceed.

I received little feedback on this proposal and can only assume there is insufficient interest to continue beyond this year.

L.E.G. UP

Before F5J there was Limited Electric Glider, LEG. This event has a short 5 minute max flight and deducted points for motor run time. It died after the universal appeal of the international introduction of F5J.

We still run LEG as a fun event at Easter's AEFA rally and brought the rules up-to-date in 2021. Fun? Yes, if it's kept low key the adrenalin rush of the rocket climbs combined with a short flight makes it attractive. And, you don't have to carry a height device and you can be competitive with any electric glider . Maybe change the prop and battery for more power.

AEFA considered all this when taking up Tamworth's offer to run an elec glider event there. LEG was used to compliment an E-RES event and there wasn't a \$5k molded model in sight. This from local Bob Ash afterwards:

Just a quick note to thank you for organising, and Les for the fantastic donation of the tape measures to our club.

"I can say there are 4or 5 members who now have said to me they are keen to have our own trial LEG event to get us ready for next year. Still working on more E-RES guys. It was a great incentive. Well done."

Keep LEG in mind for your events. Full rules on AEFA website



E-RES and LEG AT TAMWORTH.

This new event on the Calendar, held in the music town of Tamworth, NSW had modest entries but was deemed a great success by locals and visitors alike.

Weather was fine but breezy at times.

Les Safarik won E-RES claiming his first ever win in Oz.

The event was run by AEFA and In a brave move they decided to pair the old LEG event as a low-key compliment to E-RES , This paid off and five locals were impressed enough to enter next time, (see comment elsewhere). Limited Electric Glider was won by Phil Stevenson—note those motor run times!.

Thanks to TARMAC for a great field and friendship. We'll be back next year guys.

2022 Sep 10 - eRES Tamworth (Tamworth)																
Download Comp List																
Flight Scores Results																
Round 11																
Update Rounds List Refresh Results Download Report																
Results to Round 11																
#	Name	Ctry	Score	Pcnt	RawScore	Rnd1	Rnd2	Rnd3	Rnd4	Rnd5	Rnd6	Rnd7	Rnd8	Rnd9	Rnd10	Rnd11
1	Safarik, Ladislav	-	9338	100.00	9934	845	*596	774	1000	1000	950	988	815	997	1000	969
2	Stevenson, Phil	-	9325	99.86	10067	1000	*742	817	839	808	997	1000	937	937	1000	990
3	Moore, David	-	9008	96.47	9565	*557	713	1000	707	1000	1000	771	1000	909	949	959
4	Oddy, Hutton	-	8507	91.10	8959	994	1000	972	713	890	718	537	*452	820	879	984
5	Gillott, Mel	-	8486	90.88	8728	1000	663	949	825	737	997	988	534	1000	793	*242
6	Ash, Bob	-	8437	90.35	8437	912	1000	1000	1000	*0	1000	976	397	1000	845	307
7	Budniak, Robert	-	8295	88.83	8869	759	909	629	626	*574	906	1000	1000	694	772	1000
8	Pine, Peter	-	7911	84.72	8407	931	*496	809	699	667	997	663	934	660	554	997
9	Clifford, Tom	-	7163	76.71	7600	642	480	561	*437	733	969	476	962	612	728	1000
10	Whitten, Garry	-	6954	74.47	7230	877	658	966	782	449	821	629	483	637	652	*276
11	Wooden, David	-	2633	28.20	2633	694	596	522	460	361	0	0	0	0	0	*0

	Tamworth LEG	10-11 Sept 2022						
Pilot	R1	R2	R3	R4	R5	R6	BEST 5	PLACE
Mel Gillott	5.01, 5s, 0	5.0, 6s, 1m	4.53, 7s, 0	4.55, 8s, 3m	4.38, 7s, 0	5.05, 5s, 3m		
	294	344	286	327	271	330	1581	2
Bob	5.03, 17s, 0	5.06, 30s, 3m	4.42, 38s, 0	4.42, 39s, 0	5.01, 34s, 0			
	280	304	242	243	265		1334	4
Phil Stevenson	4.59, 6s, 4m		5.05, 8s, 2m	5.06, 6s, 0	5.00, 5s, 1m	4.51, 5s, 1m		
	333		332	288	345	336	1634	1
Peter Pine	4.58, 6s, 4m	4.48, 21s, 0	1.42, 10s, 0	4.52, 20s, 4m	5.02, 12s, 5m	4.53, 21s, 3m		
	327	267	92	303	345	317	1559	3
Doug			5.35, 81s, 0	5.11, 113s, 0	5.19, 67s, 0	4.55, 60s, 0		
			184	176	214	235	809	6
Larry			4.41, 30s, 0	4.25, 30s, 0	3.50, 30s, 0	4.08, 30s, 0		
			251	235	200	218	904	5

PERFORMANCE MODELS

OZeRES - 2m RES electric glider kit \$325

E-Medina - 2m RES electric glider ARF \$655

Medina - 2m RES glider ARF \$655

Avanti - 3m REAS electric glider kit, glass fuselage \$640

Avanti - 3m REAS electric glider kit, built up fuselage \$470

Vinco TR - 4m F5J moulded glider \$3,220

Fury - 1.5m electric moulded glider \$1,290

BAMF 2 - 1.5m moulded DLG \$1,290

ASW 12 - 6.3m Scale GPS racer POA

www.performancemodels.com.au



43rd Annual Armidale Sailplane Expo

Friday January 27th - Sunday January 29th 2023

Hosted by New England Model Aircraft Club

When:- Friday 27 th to Sunday 29 th January 2023
Where:- Varrane Rd, Armidale, NSW 2350 Map Co-ordinates 30°26'39.3"S 151°31'07.3"E

Personal details :-

Name:	<input type="text"/>		
Address:	<input type="text"/>		
Phone:	<input type="text"/>	FAI/MAAA	<input type="text"/>
email:	<input type="text"/>		

Your email address is useful. We can keep you aware of what's happening.

Junior (under 18)	<input type="text"/>	Septagenarian (at least 71 st)	<input type="text"/>
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Events :-

F5J:- As per current FAI rules. **9:30 Friday January 27 to 13:00 Sunday January 29. A limited class may be flown in the normal draw.**

E-Res:- As per AEFA Rules. 3 rounds will be flown on Friday and 3 rounds on Saturday

Both F5J and E-Res will use teams of up 4.

Your team :-	Team Manager	Member 2	Member 3	Member 4
F5J	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
E-Res	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Radio frequency

Event:-	ENTRY	Preferred	Alternate (if using other than 2.4GHz)
F5J	\$20 <input type="text"/>	<input type="text"/>	<input type="text"/>
E-Res	\$10 <input type="text"/>	<input type="text"/>	<input type="text"/>

Admin and services	\$10	\$10.00
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Late Entries are not encouraged. Entries close on January 20 2023.

MAAA Membership require Current MAAA Membership card to be produced upon request

Any Covid or other infectious disease rules in force at the time as determined by NSW State Government will be adhered to.

PAYMENT DETAILS

Please pay by direct deposit (preferred) to the following account

account name: **Sailplane Expo Trust**
 BSB No: **012510**
 Account No: **2.7E+08**
 Item Name: **"Your Name" Expo Fee**

or e-mail: vhoddy@gmail.com for other options

Reference sites:

MAAA Website - www.maaa.asn.au (International rules for F5J)

AEFA: <http://www.aefanet.com> (rules for eRES, and guidelines for limited F5J)

vhoddy@gmail.com or phone :- 0425 285 751

Details of the E-Res Event:-

1. Models of <2m projected span. Rudder, Elevator, Spoiler and motor control only. Flying wings, elevons, spoiler, motor only.
2. Models of predominantly wood construction preferred. Existing Millenium Cup models are suitable except for fully moulded models.
3. Electric launch to 100m or 30 sec motor run whichever comes first. Height limiting devices will be available for loan if required.
4. The task will be 5 minutes flight in 5min 30 sec window. The 5 minutes will include motor run time.
5. A landing score of 20 points will be added to flight time if landing is within 10m of spot.
6. Have fun.

Details of the Limited F5J class:-

1. For models up to 3 m span
2. Building details as per AEFA guidelines (see attachment or <https://www.aefanet.com/aefa-rules-library>)

Fine field and facilities at the friendly Tamworth club



Proposed 3 metre F5J Rules

The AEFA committee listened to many pilots out there. You told us that many of you (not currently flying F5J contests) wanted to fly in contests but were deterred by the cost of the moulded models.

In order to address this concern, the AEFA committee has framed rules for a simpler and smaller plane specification that have better performance than a 2 metre model, but at a cost substantially less than moulded gliders.

You can read the rules in the rules section, but the rules limit the wing to 3 metres (or less) and constructed predominantly of wood. Additionally the power train is limited to motors without gearboxes. We think that these two important restrictions will hold costs down.

We are publishing the rules so pilots can start to build or organise their planes.

Within a few months, there will be a suitable model available from Performance Models, a local kit supplier.

From Hyperflight UK, the Introduction and Inside are suitable planes, as is the Yellow Jacket from the US.

Pulsars and AVAs will be eligible if the wings are shortened.

On line, plans for the Bird of Time and the Bubble Dancer are available, and with an electric conversion are suitable and competitive planes.

Have a read of the rules and start building. We hope to organise the first contest (in conjunction with an F5J event) soon.

3 Metre F5J Model: Version March 7 2022

Preamble:

This category of glider addresses

- a) A glider that is substantially cheaper than fully moulded gliders
- b) A glider which one can build from plans or kit parts
- c) Performance greater than eRES, but not as good as fully moulded glider
- d) The possibility of more control functions than eRES
- e) An entry level of gliders to encourage pilots to participate in F5J competition
- f) A glider with simplified controls, allowing the pilot to focus on flight rather than adjusting the transmitter controls
- g) A category where gliders with ailerons and without ailerons can compete equally
- h) A category to limit the costs of the power train

This category is not intended to be a **stand alone** category. Pilots will fly in F5J competitions shoulder to shoulder with pilots of moulded gliders.

Pilots flying 3 metre F5J models will be entered as a separate class, and the winner on the day will be the highest placed 3 metre F5J pilot in the overall results.

Rules:

The F5J rules for models applies to this class, save that the following additional restrictions are imposed. Non compliance with any item will classify the airplane as "open" F5J class.

Projected wingspan is 3 metres or less

Model's wing must be predominately wood construction. The following methods are allowed:-

Open ribbed wing surface

or

Solid wood surface,

or

"D-box" wood surface and ribs,

or

Timber skinned foam

Tail (elevator and rudder or V tail) surfaces must be either:-

Open ribbed

or

Solid wood surface,

or

"D-box" wood surface and ribs,

or

Timber skinned foam.

For **wing and tail structures, leading edges, spars and spar caps** of composite material are allowed, if formed of rods, round tubes, square tubes or extrusions.

The **open surfaces of the wing and tails** may be iron-on plastic film, silk, paper or polyester fabric.

Ailerons are permitted

Spoilers or flaps are permitted, but not both on the same wing.

Flaps may not be used for camber change of the wing, except in the landing phase.

Spoilers or flaps must be operated by a separate control on the transmitter and are not to be **synchronised**, either in the positive or negative direction, **with the ailerons.**

The **fuselage pod** may be of wood or of composite material.

The **tail boom** may be of wood or of composite material.

The **wood fuselage** may be covered with composite material for strength.

The **motor** must not incorporate a **gear reduction unit.**

A 3 metre model (or less) that conforms to the rules must be flown in all heats.

The logo consists of the lowercase letters 'emf' in a bold, purple, sans-serif font, centered within a square frame with a purple border.

PILOT SKILLS. Joe Wurts.

Yes, pilot skill is the overwhelmingly large factor in contest results. One cannot buy your way onto the podium. In a somewhat small subset of conditions, aircraft selection will have a little bit of relevance in terms of the ability to achieve a better score. Of importance is having a lighter aircraft for very flat conditions, and for flyoffs when conditions are good and you need to do a ~20m (or less!) launch to win. Which design, well, take your pick. Most of the designs have similar performance for these conditions. There are subtle differences amongst the designs. Sometimes these subtle differences can make the difference, although the pilot still has a much larger effect on the result.

The pilot needs to have a bunch of different skills to achieve a good result.



emf

In very calm conditions, the ability to fly smoothly and optimally (with the appropriate airspeed and trailing edge position) is of very high importance. Knowing your planes performance capabilities is essential (and how to extract that performance!).

In active thermal conditions, flying optimally is of far less importance. Flying in the best air is essential. I'd much rather fly very badly in great air, than fly great in very bad air! It frequently takes rough airplane handling to acquire and stay in the best air. Sometimes one needs to bang the sticks around a bit to stay in the best air.

When there is wind, understanding the best speed to fly to go upwind becomes important. If the lift is light, then flying optimally becomes really important. Also, the ability to discern small changes in the vertical movement of the air is a large key to success.
(Used with permission. Ed)

SSL 50th Anniversary International Festival of Gliding

Milang SA

March 11-19, 2023

Join us to celebrate Southern Soaring League's 50th Anniversary with one of the biggest model glider events ever held in Australia!

- *F5J Open International March 11 – 14.*
- *Scale Aerotow and GPS Triangle Racing March 15 – 19.*

*Meet and fly with **Phillip Kolb**, a world-class pilot. Phillip will be giving talks throughout the event.*

Starting the celebration will be the F5J Open International, followed by a week of GPS and scale glider flying.

We will host the first international GPS triangle racing challenge cup in Australia. All classes will be flown over the week including Light, Sports and Scale/SLS classes.

During this time the skies will be opened up for general aerotow flying with some of our best tow pilots on hand.

Prizes and trophies will be awarded for all GPS classes and a pilot's choice award for scale gliders.

We are very excited to announce that (subject to some final logistical details) we have a special international guest attending, world-renowned multiple champion of several classes in model gliding, Philip Kolb. Philip will be flying with us and giving talks throughout the events about glider design and GPS flying and tactics.

With regards to our Milang flying field, there will be camping sites available and hangar storage for your gliders for the duration. Catering for meals throughout the week will be available at the field. In addition, there are many options for local accommodation, as we are located on the Fleurieu Peninsula and adjacent to the Adelaide Hills. You will find a range of amazing South Australian tourist attractions nearby that will appeal to the whole family.

As a club, we are excited to invite all model enthusiasts to join us for a week of celebration, flying and camaraderie.

Please follow this link to go to the Pre-Registration Form - https://docs.google.com/forms/d/e/1FAIpQLSdBHDC5Xn0w2Covx0eRJJb-krZjyv36ooXxZTltiZ-jozUw9g/viewform?usp=sf_link

Philip Kolb would like to also attend an event and give a presentation somewhere on the East Coast so the LSF seeks offers from a host club to run such an event on the weekend of 25/26

Thermal Training Notes

Marcus Stent

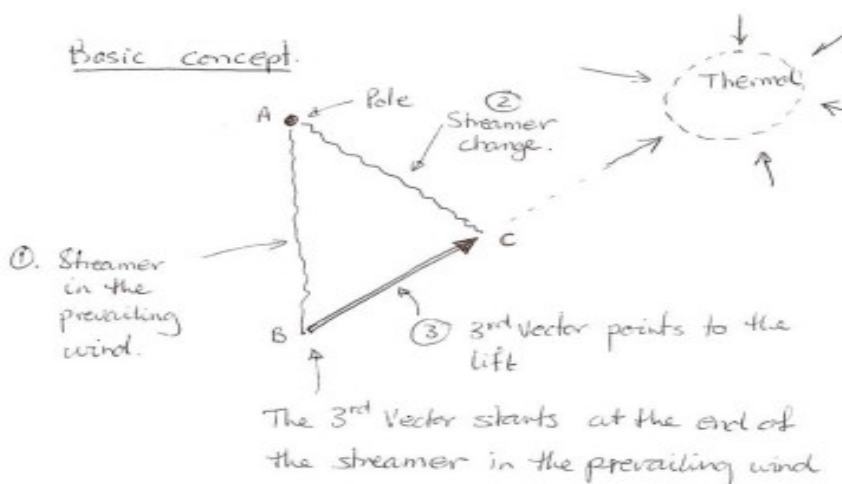
April 2016 - updated 2021

I put these training notes together to help model glider pilots improve their thermal flying skills. Note: these notes are written for large F3J/F5J models so a couple of values/mixers will be different for F3K models. The topics covered in these notes are:

1. Joe Wurts 3rd Vector.
2. Making the 3rd Vector work - Iterating the air.
3. Weather conditions.
4. Plane signs.
5. Thermalling.
6. Plane setup.
7. Returning from downwind.

1. Joe Wurts 3rd Vector

This concept is used to find thermals in windy conditions. Imagine a streamer being viewed from above. Point A is where the streamer is attached to the pole. Point B is the end of the streamer in the prevailing (no lift) wind. When the streamer moves (due to a thermal influence) the end of the streamer is now at point C. The third Vector is created between point B and point C and points to the thermal.



2. Making the 3rd Vector work - Iterating the air

To make the 3rd Vector work you need to be constantly iterating the air (e.g. constantly feeling the wind direction changes and wind strength changes) to get a mental picture of the surrounding air. Do this while you are setting up your plane, fetching a line or talking to other pilots. You will need to learn to multitask and it takes practice.

You want to feel a significant change in direction or wind speed over a period of time (min 20-30 seconds) to indicate lift or it can be just local turbulence in the air. The longer the change occurs then the stronger the indication of a thermal. Wind shifts can last several minutes with big thermals.

Every day is different and so it can take time at the start of the day to get a feel for the size and movement of the thermals. You also need to be aware of when the conditions change throughout the day to re-adjust your 3rd Vector and mental picture of the air.

Flying a handlaunch glider is a great way to quickly validate if your reading of the air is correct or if you need to adjust your mental picture.

Cont. next page—diagrams.

Flyers at Monto.
See report next
page



Many of you would have seen this article, by Marcus before but it's significant enough to be re-visited now and then. To be serialised over next few issues of emf

MY GRANDAD WAS RESPONSIBLE FOR 25 DOWNED GERMAN PLANES IN WW2

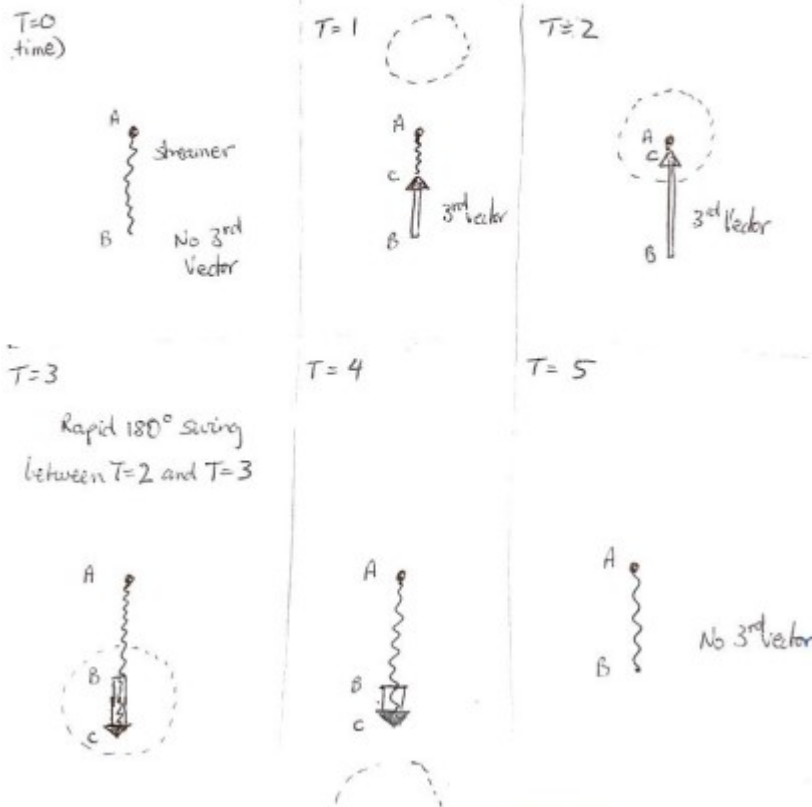


STILL TO THIS DAY HE IS KNOWN AS THE WORST MECHANIC THE LUFTWAFFE EVER HAD

EMF

Here are some examples:

Rapid change means the thermal is close.



Evan William
20h · 🌐

Qld F5J. 10—11th Sept 2022

...

Hi All, Round 2 was run at Monto over last weekend with 11 fliers enjoying the near perfect conditions. Most arrived on Friday and some managed a few flights in the afternoon. It was great to see David Tronc, Colin May and Ross Ginder back flying again after some time away due to personal reasons. The winds were generally very light although it did pick up at times on Saturday afternoon but nothing to warrant ballast. Saturday morning the lift was pretty good but after lunch thermals seemed much harder to find and the wind had shifted and coming from the West. It favored those who launched conservatively higher and left those who backed themselves with lower launches wondering what went wrong and scratching our heads. Sunday morning there was high thin cloud with the light winds coming from the South all of this provide no thermal activity for the first 2 hours although some punched forward and found some excellent wave lift. The remaining period through to lunch saw some really nice thermal activity to finish the comp. The scores were very close at the top and 1st place with 10633 was Karl Knack, then 2nd place with 10464 went to David Spain and 3rd place with 10443 went to David Walker. Karl is familiar with the podium but it was truly excellent to see David Spain and David Walker with excellent scores and challenging for the top position. Thanks to Ross for prepping the field. Lunches were catered brilliantly by Michelle with assistance from Tee on the BBQ. This was appreciated by all. The next round is at Munbilla field and scheduled for November and hoping for good conditions and a healthy attendance. Regards,
Evan

EMF

RCGA DRAFT CALENDAR 2022/23



23/10/22			Fun		Fun Fly	Diggers Rest	RCGA
28 - 30/10/22					F5J3 F5J World Championship selection trials (Fri, Sat, Sun)	WestWyalong	AEFA
6/11/22							
13/11/22		F3K1	Fun	eRES1	eRES in the AM, 3K/5K in the PM	Diggers Rest	RCGA
20/11/22							
27/11/22	OT 2				Open Thermal	Diggers Rest	RCGA
4/12/22							
11/12/22					F5J4	Diggers Rest	RCGA
18/12/22							
25/12/22					Christmas		
1/1/23							
8/1/23							
15/1/23		F3K2	Fun	eRES2	eRES in the AM, 3K/5K in the PM	Diggers Rest	RCGA
22/1/23					Armidale Expo - Date to be confirmed	Armidale	New England

AEFA CALENDAR 2022

October			
9-Oct	HSL Event	Heathcote Cup F5J	Maddens Plains
28-30 Oct	AEFA F5J Perpetual Trophy	F5J Annual Tournament - World Champs Team Selection Trial	West Wyalong
30-Oct	SSL Club Event	F5J Glider	Milang
November			
6-Nov	Nowra event	Millennium Cup	Shoalhaven
13-Nov	SSL Club Event	F5J Glider	Milang
19-20 Nov	Qld State F5J Titles	QLD F5J Series Round 5	Munbilla
27-Nov	HSL Event	HSL Spring Club Competition	Maddens Plains

All contributions, including free Classifieds, welcome to Mel Gillott at reshiftxyz@hotmail.com

**** Electro Motive Force . The emf magazine, including all back-issues is also available on the AEFA website. Thanks Ralph Dephoff.**

1. a) $E=W/Q$. b) *Inside* a source of emf that is open-circuited, the conservative electrostatic field created by separation of charge exactly cancels the forces producing the emf. c) Electromotive force is the characteristic of any energy source capable of driving electric charge around a circuit.
2. A force, metabolizing as a passion to get airborne in a more environmentally responsible way without unduly disturbing other humans or the wildlife by using only the power of electro (not Max Dillon) and nature.
3. A catchy name for an electric model binary transmitted memory of interesting clutter. John Quigley.