



M.M.A.F.A.

Official newsletter of the
Malta Model Aircraft Flying Association
Website <http://www.mmafa.eu>

Issue 3/2014
March

From your President

Dear Members,

In this month's very full newsletter please find the updated **Standing Regulations** and the **Flight Safety Code**. (**note amendments to flight code regarding Helicopter pilot positions following helpful and constructive feedback received.)

As President of the Association I cannot emphasize enough the importance for all members to review these rules and code carefully **and follow them to ensure SAFE flying at all times.**

The rules are there to protect us. At the moment we are trying very hard to restore the very poor perception and image the Association has in the eyes of the Authorities and this can only be achieved if each and every member plays his part.

Members must understand that **if our Association is to have a future and any hope of keeping our present flying site, we CANNOT COMPROMISE ON FLIGHT SAFETY AND STRICT OBSERVANCE OF THE RULES: NO IF, BUT OR MAYBE.**

This applies to ALL members at ALL times of the week and NO matter the type or size of model. I expect each and every member to comply. (See back page "Meeting with Civil Aviation Authorities").

NEXT MAJOR EVENT INDOOR EXHIBITION

As part of our plan to uplift the image of our Association and make it more widely known, I am pleased to announce that the Committee has unanimously approved the excellent initiative of our PRO Josef Gatt to launch a **3 day Static Exhibition of all our models entitled**

65 Years of Model Aircraft Flying at Ta' Qali 1949-2014"

The Malta Aviation Museum Foundation has very generously offered the use of its main Hangar (which houses the DC 3 Dakota) free of charge for this purpose. I would publicly take this opportunity to thank Mr. Ray Polidano, director of the Museum Foundation for this support. Needless to say I urge all Members to start polishing their models for this grand event and important public relations exercise. We can show off our pride and joy(s), including current builds in progress, to the visiting public and explain what we do and how the models operate to share with them the passion for our great hobby.

This will be a great opportunity to mark our presence as the oldest established civil sport activity at Ta'Qali and make a statement to all that the Association is still very active and vibrant and has every intention of remaining so at Ta'Qali.

Please diarise these important dates:

Saturday to Monday 29th to 31st March (opening/closing times to be advised).

NOTE Fri 28th (pm) & SAT 29th (am) window to set up model displays.

NB Scale Meet planned for 31st March is hereby postponed to another date.

We have just a few weeks to go!

The Committee needs all your support to make this exhibition a huge success. Any members willing to lend a helping hand in setting up the exhibition display tables and/or manning the stands over the 3 days is kindly asked to contact Josef Gatt (sms 99490045), or any committee member asap.

We are also asking for the loan of old photos (or scans), radio control equipment and possibly vintage models and engines to further emphasize the historical connection of our Association with Ta'Qali. Please contact Michael Curmi (sms 99493415) in this regard.

See "participation form" in page 3. Please complete and hand in soonest.

The Association has already received three very valuable sponsorships to cover part of the costs via member Lino Xuereb for which we are most grateful. Of course we welcome **more sponsors**, so please come forward with information on anyone willing to offer support in return for displaying their Company banner etc. The committee will continue to keep you updated. I look forward to the participation of all of you. Let's make it a great success!

MEMBERS' FEEDBACK TO IMPROVE OUR ASSOCIATION

Members are encouraged to come forward with any questions , constructive comments , suggestions, proposals or ideas to the Committee for consideration, to improve our Association for the ultimate benefit of members. Members are also urged to notify the committee of any event / incident which may have breached the MMAFA Safety and Standing Regulations and Flight Code, as these cannot carry on unchecked. The intention is to ensure that these events are dealt with in the proper manner to avoid a repeat incident .

The success of the MMAFA depends on the cooperation of all members.

Any comments / or event reports should be submitted in writing to info@mmafa.eu or at MMAFA PO Box 22 Balzan BZN1000 or verbally to any committee member.

Members are requested to use the proper channels above to communicate with the committee on internal club matters and issues.

It is in the members' interest that comments of this nature are not posted on Facebook public blogs.



65 YEARS OF MODEL AIRCRAFT FLYING AT TA'QALI 1949-2014

29th, 30th, 31st March - Malta Aviation Museum Ta' Qali

EXHIBITING MEMBER PARTICIPATION FORM (WRITE IN BLOCK LETTERS PLEASE)

MEMBER NAME SURNAME

CONTACT NUMBER (PREF. MOBILE)

* State type of model eg Glider, Aerobatic, Trainer, Jet, DF, Warbird, Heli or Quad.

MODEL 1	NAME	<input type="text"/>	WINGSPAN MT	<input type="text"/>	Type*	<input type="text"/>
MODEL 2	NAME	<input type="text"/>	WINGSPAN MT	<input type="text"/>	Type*	<input type="text"/>
MODEL 3	NAME	<input type="text"/>	WINGSPAN MT	<input type="text"/>	Type*	<input type="text"/>
MODEL 4	NAME	<input type="text"/>	WINGSPAN MT	<input type="text"/>	Type*	<input type="text"/>
MODEL 5	NAME	<input type="text"/>	WINGSPAN MT	<input type="text"/>	Type*	<input type="text"/>
MODEL 6	NAME	<input type="text"/>	WINGSPAN MT	<input type="text"/>	Type*	<input type="text"/>
MODEL 7	NAME	<input type="text"/>	WINGSPAN MT	<input type="text"/>	Type*	<input type="text"/>

* part built models are most welcome especially those of traditional construction.

Tick boxes BELOW (x) if applicable THANK YOU IN ADVANCE FOR YOUR SUPPORT

I am happy to lend a hand to set up exhibition Friday pm Sat am

I am happy to spend some time to man displays

Saturday	<input type="text"/> am	<input type="text"/> pm
Sunday	<input type="text"/> am	<input type="text"/> pm
Monday	<input type="text"/> am	<input type="text"/> pm

I am pleased to loan the following items to display

Old photos	<input type="text"/>
Vintage Radio equipment	<input type="text"/>
Vintage Model engines	<input type="text"/>

Please complete this form asap and hand to any committee member or email scan to info@mmafa.eu

CONTACTS JOSEF GATT 99490045
MICHAEL CURMI 99493415

or any other Committee Member

THANK YOU !



STANDING SAFETY REGULATIONS (rev. Feb.2014)
**PILOTS MUST ABIDE FULLY WITH THE FLIGHT SAFETY CODE WHICH FORMS AN
I NTEGRAL PART OF THESE STANDING REGULATIONS. (see Appendix A below)**

(a) SAFETY ON THE GROUND - ENTERING AND LEAVING THE FLYING SITE.

- (i) Drive in and out of the MMAFA compound at the slowest possible speed and keep a sharp lookout for pedestrians, especially children.
- (ii) Members should park their cars in the marked parking zones on the Club House side in an orderly manner to allow parking for all members and visitors.
- (iii) Models and equipment should be assembled within designated pits areas.
- (iv) Starting and running of models engines anywhere in the parking area outside the pits is PROHIBITED.
- (v) Members ' young children and the general public should not enter the pits area.
- (vi) It is the responsibility of each individual member who makes use of club umbrellas, frequency board, wind sock and other portable equipment or furniture, to return them to the clubhouse after use.
- (vii) It is the responsibility of the last member leaving our flying site to make sure that the Club House, Toilet and the Gate are locked.
- (viii) It is the duty of all members to make use of club facilities in a responsible manner and to leave them in a good state of repair and cleanliness after use.

(b) SAFETY IN THE AIR.

- (i) Flying may only take place as listed below, on any day of the week including weekends :
 - Electric powered models 07.00 hrs until sunset.
 - All other powered models 08.30hrs until sunset.
- (ii) The Malta Model Aircraft Flying Association includes a majority of members who fly radio controlled fixed wing aircraft and also includes members who fly helicopters & vertical multi-rotor quads, or both. IT IS AN ESTABLISHED SAFETY PRINCIPLE THAT FIXED AND ROTARY WING MODELS SHOULD FLY SEPARATELY.
- (iii) Members flying helicopters and any type of Quad may fly during the FIRST 15 MINUTES OF EACH HOUR AS INDICATED BY THE AUDIBLE ALARM ON SITE. Fixed wing pilots may fly in the remaining 45 minutes of each hour.

- (iv) The number of models in the air at any one time should not exceed 6 (six) . Each individual flying session should not exceed a maximum of 15mins. total FLYING time out of respect of other pilots waiting to fly.
- (v) **Models in excess of 20kg dry weight (without fuel) may fly provided that the named pilot is in possession of the mandatory, current, “exemption to fly ” permit issued by the CAD for that specific model aircraft.**

(c) BEGINNERS (applies also to Helicopters and Quads)

- (i) All beginners’ models must be checked for full airworthiness by an instructor or competent modeler before any attempt to test fly.
- (ii) At NO TIME can a beginner operate a model, even on the ground, unless an instructor or an expert flier is standing by to assist in case of need.
- (iii) Trainee pilots are only allowed to fly under the close supervision or guidance of an expert flier or instructor, at any time.
- (iv) Trainee pilots must pass a flight test to determine their ability to fly unsupervised (solo flights) in a safe manner and can demonstrate full control of their model.
- (v) The issue of Certificates of proficiency in model flying is at the sole discretion of the Committee or official(s) designated by the committee to oversee the training and flight test process.

(d) OTHER UNIVERSAL PRE-FLIGHT AND IN-FLIGHT SAFETY CONSIDERATIONS.

Note: The responsibility for the safe conduct of the flight lies with the person flying the model aircraft.

Thoroughly check your model prior to each flight for:

- (i) Apparent damage resulting from prior in-flight vibration, landing knocks, or during transportation.
- (ii) Check for integrity all control surfaces, hinge points and control linkages, flying surfaces, ROTOR blades (Helis and Quads).
- (iii) Ensure your batteries are fully charged, fuel tanks are full and compressed air tanks pressurized (where applicable).
- (iv) Perform a range test of your model before each flight.
- (v) Ensure that “fail safe” operation of radio equipment is active to allow throttle slow and other control surfaces holding at neutral position.
- (vi) Secure and restrain your model during start up to prevent it from moving forward. Use a helper as necessary. Ensure spectators are kept at a safe distance.
- (vii) Ensure safety equipment where applicable (eg. Fire extinguisher) is within immediate reach and that you or your helper is conversant with its use.
- (viii) Check your flight controls before takeoff for full and free movement of control surfaces.
- (ix) Carry out a full power check prior to take off.
- (x) **The larger, faster and more powerful the model plane or helicopter, the greater the responsibility of care and extra caution by the pilot to ensure a safe flight (irrespective of whether it is a turbine, big block internal combustion or high output electric propulsion).**
- (xi) All models powered by Jet turbines or internal combustion engines above 26cc and helicopters (whether electric or IC powered), must be started and shutdown in designated start up areas. (Hover taxi of Helicopters is restricted to runway and landing zones)
- (xii) Electric powered propeller driven model planes of any output must be treated with equal respect and caution as any other power plant, especially when connecting batteries and or carrying models to and from the flight line.
- (xiii) All flyers must be ready to take evasive action and land immediately if a full size helicopter or micro-light / light aircraft is spotted heading directly towards the flying site at low altitude.
- (xvi) Effective silencers on IC engines are compulsory. A maximum level of 85 dB at 7 metres is in

- (xiv) **Max. operating height per Air Navigation Order (ANO) is 400 feet (123 metres) above ground level. Max. operating radius is 500 metres as measured from the centre of our runway. Avoid flying directly over any building within this radius. Factor in your model's SIZE and SPEED to respect these limits.**
- (xv) Running in of engines must be performed away from the pits and flyers in the designated area and always respectful of other members present.
- (xvi) Effective silencers on IC engines are compulsory. A maximum level of 85 dB at 7 metres is in force on all days of the week.

(e) TRANSMITTER FREQUENCIES

The predominant radio frequency is **2,4 Ghz** which no longer falls under the mandatory control procedures (i) to (viii) that follow.

Members who still use internationally approved 35 and 41 Mhz frequencies must follow the rules hereunder without exception.

- (i) Be on the lookout for other users (if any) of 35 and 41 Mhz equipment so as to be aware of each other and coordinate your activity, especially if on the same channel frequency.
- (ii) Use the FREQUENCY BOARD TAGS without exception.
- (iii) Pick up your frequency tag BEFORE switching on your Transmitter.
- (iv) Return your frequency tag to the board immediately after switching off your transmitter and ensure you do not take the tag home in your flight box, to the inconvenience of other members.
- (v) It is strongly recommended that the principle remains of impounding transmitters between flyers on 35 and 41Mhz bands.
- (vi) Transmitter aerials (35 and 41Mhz) should be retracted while in the pits and while taxiing in & out to the runway. REMEMBER TO EXTEND YOUR TRANSMITTER AERIAL BEFORE TAKEOFF!
- (vii) Beginners nowadays are more than likely to be equipped with 2,4Ghz radio. However, any beginner who opts to use 35 Mhz may only use channels numbers 81 to 90 on this band until further notice.
- (viii) Fliers who opt to continue teaching their children to fly, using their own 35mhz and 41 Mhz equipment, are exempt from clause (vii) and may use their own allotted frequency for this purpose, however full responsibility lies with the parent.

IN ALL CASES IT IS HIGHLY RECOMMENDED NOT TO USE MOBILE PHONES ANYWHERE NEAR ANY TRANSMITTER AS THEY HAVE BEEN REPORTED TO HAVE CAUSED INTERFERENCE.

APPENDIX "A"



FLIGHT SAFETY CODE

FOR FIXED WING AND HELICOPTER PILOTS (This code forms an integral part of the Association's Standing safety regulations and must be observed at all times)

FLYING POSITIONS

- **Fixed wing pilots** must maintain one common grouped position on the flight line.
- **Helicopter pilots** shall exceptionally align themselves and maintain a greater safety distance (min. 30 metres) between them on one side of the runway.
- **Quad pilots** shall if other helicopters are flying :
 - (i) Use an alternate launch and recovery pad allocated for quads in the grass area south of the central taxiway and keep away from the runway, and other helicopters.
 - (ii) Launch on a SE heading and recover on a NW heading, and keep clear of the runway, and other helicopters.
 - (iii) Avoid the Club gate area and access road at all times.
 - (iv) Never launch or recover from the pit area.
- Pilot(s) on the flight-line **HAVE PRIORITY** and other pilots wishing to fly must group themselves on the same side as these pilots.
- In the interest of safety it is **ABSOLUTELY FORBIDDEN** for pilots to fly models from opposite sides of the runway at the same time.
- Any Pilot who feels uncomfortable flying from the current fliers' position (example facing the sun), should delay the flight for a few minutes until all the other pilots land, after which he is free to cross to the far side of the runway and assume priority.
- **PRE-FLIGHT CHECK** your model thoroughly before each flight in a methodical manner.
- **START** your engines safely in the prescribed areas.
- **TEST** your engines and **TAXI** your models **AT A SAFE DISTANCE** from other fliers. Test your brakes if fitted.
- Pilots on the flight line are to keep clear of the central taxiway **RUNWAY EXIT** to allow unrestricted space for models to taxi in and out, and pilots to walk in and out, safely.
- Do **NOT** take-off, or land in the direction of other fliers.
- Ensure the take-off and landing area is **CLEAR**. Be ready to abort your take or landing if runway becomes obstructed.
- Do **NOT** fly over other pilots.

APPENDIX "A"



FLIGHT SAFETY CODE

Continued..

- CALL out your take off, missed approach (overshoot), and landing.
- Exercise utmost CARE when exceptionally crossing the runway when you have priority only (see above).
- Make your intentions KNOWN to other pilots on the flight-line loud and clear.
- Fly in a SENSIBLE and SAFE manner to avoid mid-air collisions.
- Factor in your model's SIZE and SPEED in managing your flight path and height above ground.

KNOW YOUR LIMITS AND THE MODEL'S LIMITS. DO NOT SHOW OFF.

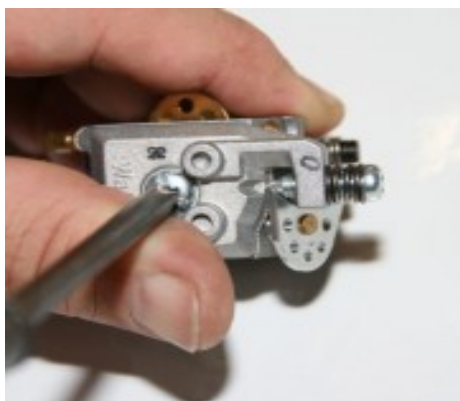
- **IN ALL CASES IT IS ABSOLUTELY FORBIDDEN TO FLY OVER THE CLUBHOUSE, PIT AREA, TAXIWAY AND GRASS FORECOURT AT ANY TIME AND AT ANY HEIGHT.**

AVOID NO FLY ZONES (SEE MAP ON CLUB NOTICE BOARDS).

- **DO NOT PLACE YOURSELF AND OTHERS AT RISK.**
- **DO NOT JEOPARDIZE THE CONTINUED USE OF OUR FLYING SITE BY YOUR ACTIONS, OR NEGLECT.**

Technical Corner

How To: Rebuild a Walbro carburetor



One of the great features that make giant scale RC airplanes so popular, is the bulletproof user-friendly nature of the Walbro carburetors used with most of the gas engines powering them. Once a gas engine is properly adjusted, its carburetor usually won't need to be tweaked again for most, if not the entire flying season. As an example, my Hangar 9 quarter-scale Piper J-3 Cub PNP is powered by a Zenoah G-20 gas engine, and in its four years of operation, I have never needed to adjust the high- or low-end needle-valves. But, to maintain optimum engine operation, you should do some basic engine maintenance and cleaning.

There are a few things that can affect the performance of your Walbro carburetor and these include, dirty un-filtered fuel, debris ingested at the flying field, and possibly water which can cause internal corrosion. No matter what the cause, whenever you notice obvious dirt or mud in your carburetor or if you notice a distinct decline in your engine's performance, the first thing you should do is open up the carburetor and take a look inside. This takes a minimum of tools and time and this article shows how I keep my Zenoah engine and Walbro carburetor happy. You can make any RC airplane more reliable by keeping its Walbro carburetor clean.

What you need

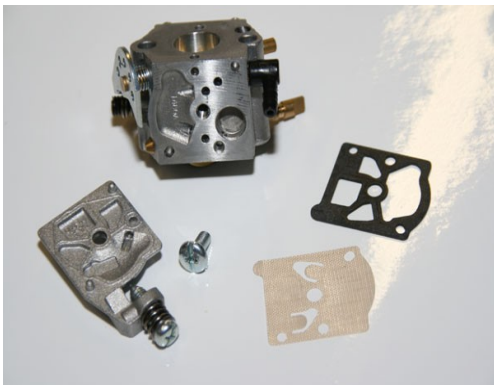
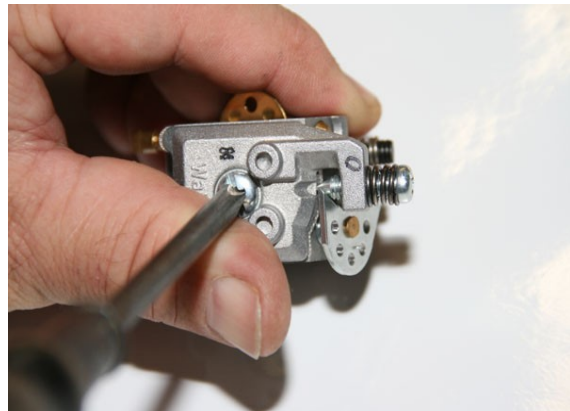
To get inside the Walbro carburetor the required tools are a common head and Phillips head screwdrivers, Allen wrench or hex driver, a mild spray solvent like WD-40, some bamboo BBQ skewers and Q-tips. Don't use a high pressure air gun to clean the carburetor as this can drive dirt deeper into the fuel passages not to mention scattering a bunch of the smaller rebuild parts and pieces. A soft cotton rag or towel to cover your work surface is a good idea too.

Start by draining the fuel from your model then remove the engine cowl so you can disconnect the throttle linkage and fuel line. You can do this job with the engine attached to the model or you can remove the engine and work on it that way. It's up to you. If you remove the engine, you'll have to disconnect the spark plug lead, the ignition timing sensor lead and the engine attachment bolts. You might as well remove the muffler also so you can give the entire engine a good cleaning before reinstalling it on your model.



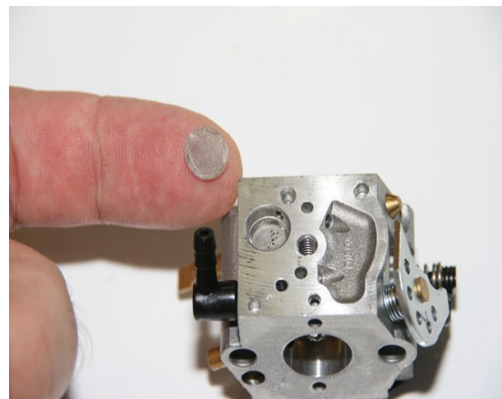
2
Here's the engine removed from the Piper Cub. I prefer to do this job apart from the model to give me plenty of elbow-room to work in. With a very dirty engine, place it on top of a paper plate or a disposable foil tray so you can keep your work area as clean as possible.

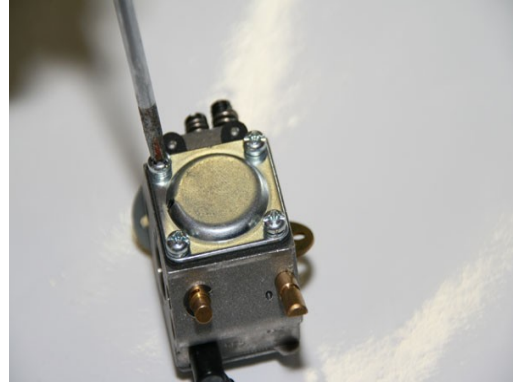
3.
Remove the carburetor from the engine. Simply remove the two attachment bolts and the spacers from either side of the intake. Be careful not to damage the gasket. Unless your carburetor has suffered a major, muddy ground strike or it has suffered a severe fuel blockage, all you'll need to do is give the carburetor a good cleaning and possibly rinsing out the main filter screen.



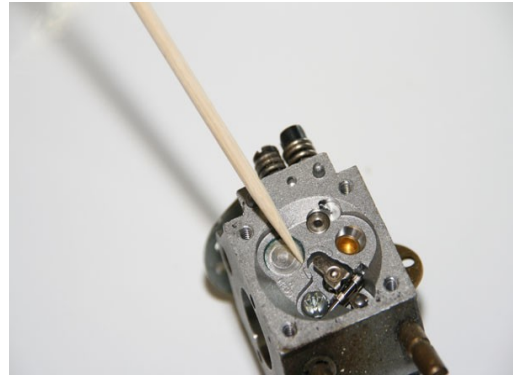
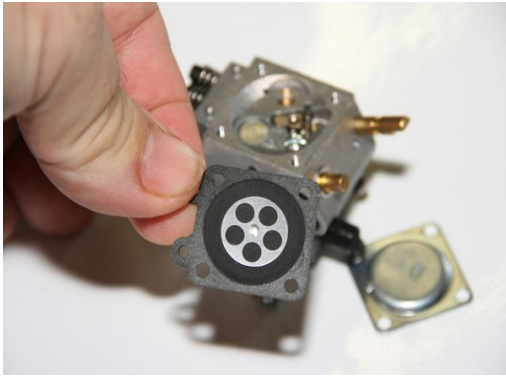
4.
On the inlet side of the carburetor body, the removal of the single center screw gives you access to the fuel pump diaphragm, gasket and the unit's fuel filter screen. Remove the screw and side cover then inspect the thin diaphragm and the flapper tabs to make sure there is no deterioration. Clean out any obvious debris using the BBQ skewer. Don't use a sharp tool or a hobby knife as these can damage the surface of the passages.

5.
Should you find that the filter screen is blocked with gunk or has trapped some dirt, clean it out with a quick spray of WD-40. If that doesn't do the trick, a replacement screen is included in most Walbro rebuild kits. These kits are available from gas engine manufacturers as well as at local small engine shops. This one is from Enforcer at Warehouse Hobbies. Some hot shot pilots have suggested you can discard the filter screen all together then use clean filtered fuel. I don't recommend this as the increase in fuel flow is minimal

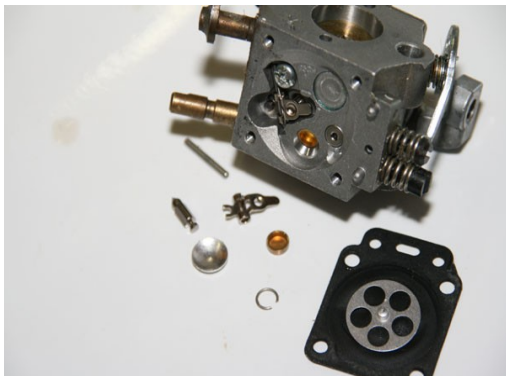




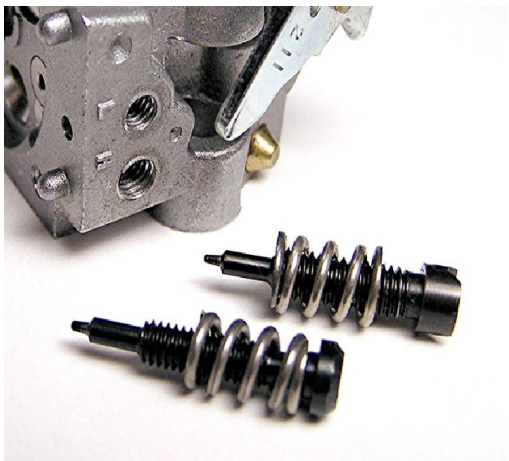
6.
In most cases, a good cleaning of the inlet side and possibly the replacement of the gaskets is all that's required to restore proper engine operation. If however that does not help, you can check the fuel metering section by removing the other side cover that's held in place by four corner screws. Again, check for any obvious debris and give a light spray of WD-40.



7.
Held in place with a small screw, the inner metering needle, spring and lever arm can wear over an extended period. These parts automatically adjust the fuel flow to maintain proper fuel flow relative to outside atmospheric pressure. If these parts show wear, carefully replace them with the rebuild kit parts. Use care and don't force anything in place.



8.
Again, it important to limit your cleaning only to soft non-metal tools to avoid damage to the carburetor components. Gasket scrapers, razor blades and any other sharp utensil can seriously harm the relatively-soft aluminum the carburetor body and cover plates are made of. Using them can lead to air leaks which are not a good thing!



9.
The last parts to clean are the high- and low-end needle-valves. Give them a good external cleaning before removing them from the threaded mixture ports. Before removing them completely, gently screw them in (clockwise) and count the number of turns it takes before they bottom out. When replacing them, the high-end needle should be screwed in completely then adjusted out 1 ½ turns out. The low end needle should be close to 1 1/8 turns out. Make sure the needles and threads are clean, give them a

10.
With your carburetor properly cleaned and flushed of any debris, reinstall the components using either the undamaged original parts, or the needed replacement parts from your rebuild kit. When you reattach the carburetor to the engine, replace the intake gasket between the carburetor and the engine. If the gasket leaks air it will cause the engine to run lean. Check the alignment of the carburetor's pressure holes and make sure they line up properly with the holes in the attachment block. They allow crankcase pressure into the carburetor to activate the fuel pumping diaphragms. If they do not line up, the engine won't start.



>Conclusion

Being able to remove, inspect, clean and rebuild your Walbro carburetor will ensure a smooth running engine and will save you a few bucks from not having to send your engine in for service. Glitches with Walbro carburetors are far and few in between, but should something come up you're now ready to fix it yourself. Happy flying!

>Quick Field Tips

- Always filter your gasoline. Use a filter in your fuel pump plumbing and inspect your fuel container to make sure nothing gets in the fuel.
- Add a fuel filter to the fuel inlet line for your model.
- Snug down the carburetor cover screws snugly but do not use thread locker. This can damage the aluminum threads in the carb body.

If you are going to store your model away for an extended period of time, drain the fuel tank and then run the engine to burn up the fuel left in the fuel lines and inside the carburetor. Use a spritz of WD-40 into the air inlet and flip the prop over a several times to coat and protect the inner fuel passages.

Committee Activity

Your Committee intends keeping its members updated and informed from time to time about its work. Since being elected your committee has already met six times at our clubhouse. All meetings lasted between 18:30 till 23:00 on average, as many outstanding matters needed urgent attention, including planning the way ahead. Much more still needs to be done.

However your committee is ready to work hard and we are counting on all Members for their full support and cooperation.

The Committee attended two cordial meetings with the Aviation Museum Foundation director Mr. Ray Polidano to explore areas of common interest and cooperation. The first exciting initiative is announced earlier in this newsletter.

The Committee requested and attended a very important meeting with the Civil Aviation Department Director General Mr. George Borg Marks, who was assisted by Mr. Nigel J. Dunkerley and two other officials from the Inspectorate of Flight Safety.

The Committee's intention was to seek better understanding of current issues, improve lines of communication and to establish a closer rapport between the Directorate and the Association with a view to move forward.

The key issues discussed which were raised and greatly stressed upon by the CAD where:

- THE URGENT NEED TO IMPROVE FLIGHT SAFETY AT TA'QALI.
- STRICTER OBSERVANCE AND ENFORCEMENT OF THE ASSOCIATION'S RULES, FLIGHT CODE AND THE AIR NAVIGATION LAWS WHERE APPLICABLE TO MODEL AIRCRAFT.
- CAD ON SITE INSPECTIONS.
- RECENT INCIDENTS INVOLVING A HANDFUL OF MEMBERS WHICH HAVE TARNISHED THE GOOD NAME OF OUR ASSOCIATION.
- CONTINUED USE OF THE FLYING SITE.

The revised Standing Regulations and Flight Safety Code published in this newsletter are intended to respond immediately to the CAD's concerns and members **MUST COMPLY** if we are to have any future at Ta'Qali. **WE URGE ALL MEMBERS TO COOPERATE FULLY BEFORE IT IS TOO LATE.**



Official Newsletter of the
Malta Model Aircraft Flying
Association

POSTAL ADDRESS

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**Look up our Website to keep up to date with the Association's
Activities**

<http://www.mmafa.eu>