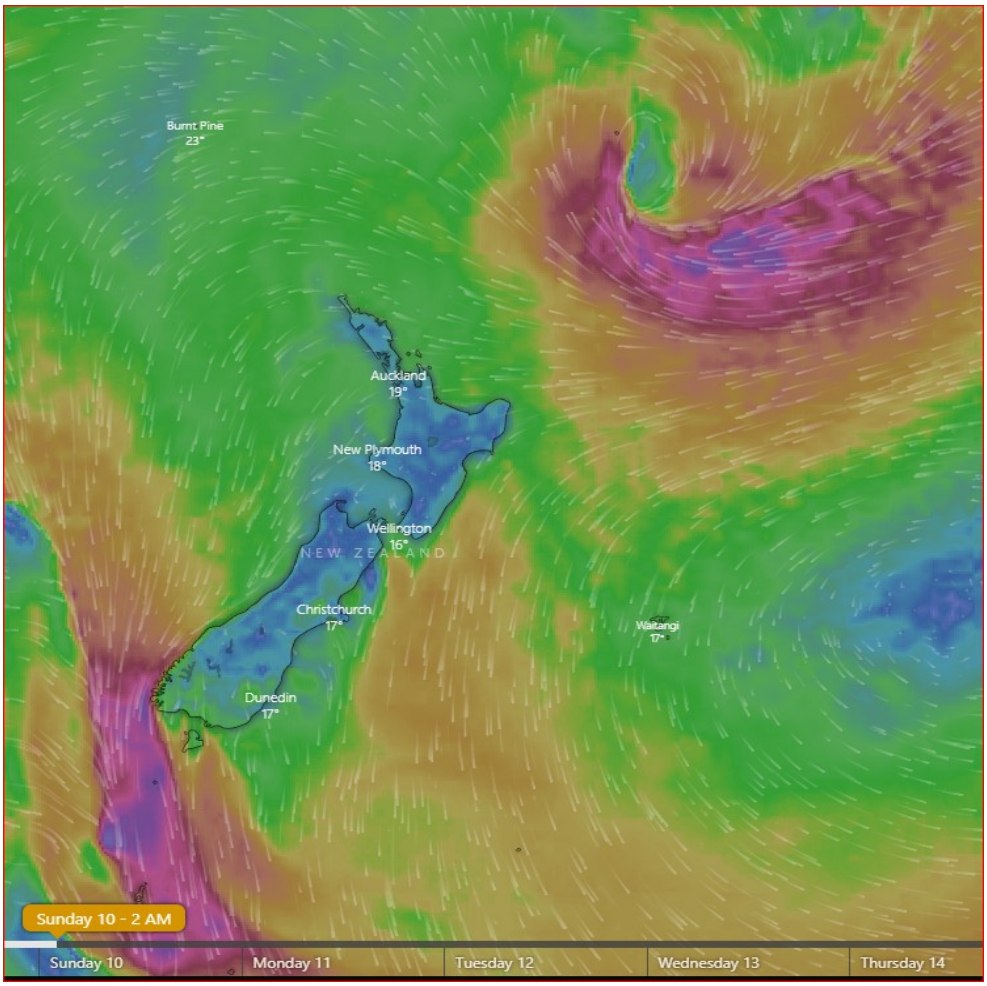
Recreational Pilot e-zine
Issue 139
February 2019

RAANZ NATIONAL FLY-IN 2019

Te Anau/Manapouri Aerodrome February ~~8th, 9th, 10th~~

Sorry folks, but the weather dictated events and it was brought forward to 6-7-8 February (on as this is being emailed out).
Here's why...



We did an urgent email-out to members, but I notice that many emails to subscribers on xtra.co.nz initially bounced, so may not have been delivered in time.

Incident reports received

Incident Details

Microlight type/model	spa panther
Place of incident	Feilding Aerodrome
Other aircraft involved	no
Describe the incident	The Engine stopped outright at around 800ft during climb out from 10 and just turning on to crosswind leg, landed in a paddock wich was a little small and at about 20kts ran into the fence damage to cowling gear, mounts spinner and prop
Describe the affect on safety	pilot was uninjured
Remedial action taken	suspected fuel issue at this stage, will update when issue has been identified
Corrective or preventive action recommendations	will post when issue has been identified

- Confirmation of cause and corrective action not yet received.

Incident Details

Microlight type/model	Quad City Challenger 2
Place of incident	Whakatane Airport
Other aircraft involved	None
Describe the incident	Nosewheel touchdown during landing caused bounce. Aircraft eventually touched down safely and completed taxi to hangar.
Describe the affect on safety	Alloy steering head shaft bent laterally. No further damage was found during a thorough check by owner.
Remedial action taken	New shaft and crosstree have been ordered from Quad City and will be fitted, after which a thorough check of the aircraft will be carried out by an experienced aircraft technician.
Corrective or preventive action recommendations	Further training for pilot.

ZK-OOZ accident report

CAA have published the report on the ZK-OOZ fatal gyrocopter accident. It can be read here.

Sober reading of a low time pilot off for a fly of his plane, keen to let his boss see him flying, pushing the boundaries of his abilities performing manoeuvres at low altitude, while his parents wait for him back at his home field....

Defect reports received

Defect Details

Microlight type/model	Tecnam P92 Echo Super LSA
Total Time in Service (hrs)	498
Defect area	Airframe/Engine/Controls/Flying surfaces/Undercarriage/etc
Describe the defect	Engine failed to start.
Describe the affect on airworthiness	Occurred after aircraft had sat unused for six days when attempting to start prior to flight. Not airworthy until fault rectified.
Remedial action taken	Fault traced to ignition electronic module/s. Electronic module A replaced and engine functioned normally on both ignition circuits. Two new electronic modules A and B fitted and engine functioned normally.

This is an interesting case- more related to the Ducati ignition module than the aircraft.

On further discussion with operator-

- Prior flight both 'mags' confirmed operational at shutdown check.
- 6 days later engine would not start. Operator reports battery/starter good, engine spinning over as expected.
- Replaced a single module and engine started OK, both modules confirmed working, engine would start fine on either module alone (new module A or existing module B).
- In the interests of safety both modules were replaced.

There are similar reports on the internet.
It appears that some modules will exhibit a condition where they will not start after being idle for some days, but come alive and will start after a short period of running.
The operator is certain this is not a marginal spin-up issue with the engine initially being spun below the required RPM, spinning faster once engine warmed up and battery topped up.

Why should GA be asked to pay for Airways NZ Ltd capital expenditure?

Ian Andrews President NZ Aviation Federation.

> *This article was prepared by Ian and the NZAF on behalf of all Recreational Aviation Orgs. It was first published in Aviation News, reproduced here with [permission*

The NZ Aviation Federation cannot support the proposal to mandate the fitment of ADS-B OUT for GA VFR aircraft below FL245 without the capital cost being shared across all users of the aviation system.

Our policy on this matter has never changed. The NZ Air Navigation Service Provider, Airways NZ Ltd, (ANSP) has chosen to replace the current secondary surveillance radar system (SSR) in 2021 with a cheaper alternative which requires the entire GA VFR fleet to replace their current, serviceable transponders, with more expensive units. This transfers the costs of the new infrastructure from the ANSP to the operator for a marginal benefit to the operator. This is a purely commercial decision by Airways NZ which is proposed to be mandated by CAA.

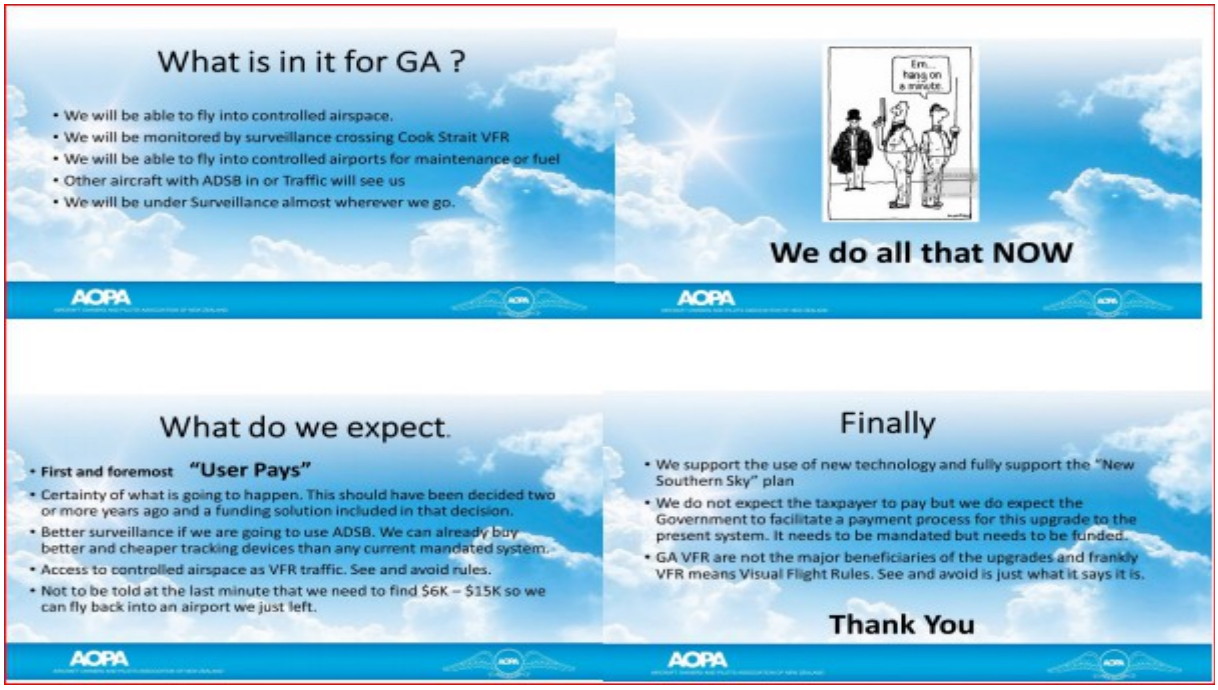
You could say it is the Government monopoly forcing a cost onto a small section of the users of the aviation system for a benefit that will accrue to all the users of the aviation system.

Back in about 2009 when Airways NZ first indicated that they would not be replacing the ageing radar system by going to a much cheaper and more efficient system called ADS-B, the question of cost and who would pay was also raised. I believe that many General Aviation (GA) operators considered it would be like when the radar was first introduced and transponders were funded by way of a deferred loan system orchestrated via Airways NZ.

Since then there have been untold meetings and seminars run by both Airways and CAA with the question of cost to the GA operator being raised but no definitive solution put forward. In April 2015 as President of AOPA NZ and President of the NZ Aviation Federation, I was asked to give a presentation from the GA perspective at an ICAO APAC ADS-B seminar being held in Christchurch. My message was very clear and raised a few eyebrows at the time. It was made abundantly clear that GA would not be picking up the cost of new equipment so that Airways could save on capital cost of replacing their ageing radar systems.

Here are some of the actual slides from the presentation.

The total of 3800 aircraft is still considered to be correct but fortunately the cost of the Appareo all in one transponder has come down to about US$3000 plus installation so we say the cost of the equipment would be now about NZ$ 5,500 incl GST. There have been other suppliers match this price as well, so we are not promoting any particular product just showing the costs. On top of that capital outlay will be the installation cost which will vary from aircraft to aircraft. A certified aircraft with and STC should be able to have an installation done in between 10-15 hours so let's say around $1000 - $1500. There has been a lot of progress made with CAA on getting the installation easy and certification simple. There are things in the pipeline to make that happen.



That was four years ago but it is still as relevant today. It has been raised at every New Southern Sky future surveillance meeting since. CAA have established the criteria for equipment, the rule is in place for above Flight Level 245, the basics for below FL245 is written, waiting for Cabinet approval and then will go out for consultation as an NPRM. The proposal is for implementation of a new rule in December 2021.

There has been no indication to GA on what a contribution may look like, or how much it could be. We are told at every meeting that there are discussions between CAA, MoT and Treasury but no guarantees of what, or how much, or if it will happen.

If we are to fit 3,800 units in the next 30 months there needs to be a decision made now.

NZAF have made a statement that we expect the cost of the equipment, say NZ$5,500 which includes GST, will be funded by the Air Navigation Service Provider (ANSP) as part if it's capital upgrade to the surveillance infrastructure. That would then become an annual cost charged at normal rates to all users of the Aviation system. Normal procedure for capital expenditure.

CAA commissioned a Cost Benefit Analysis by EY Consulting. That report clearly shows that the benefits fall to the ANSP and the costs fall to GA. The figures substantially agree with what was said in 2015. Airways NZ will save $20m and GA will pay $20m. The actual amounts are not important, but the principle is.

We accept that we are in a user pays environment, but who is the user. NZAF believe this is an aviation system wide benefit and should be charged accordingly. Private GA does not really need air traffic control. Air Traffic Control (ATC) is there for the whole system and that includes all the fare paying travellers who fly to their destinations. The system is designed for the Airlines and scheduled operators who carry the paying public. The passengers expect the highest degree of safety that can be achieved. They have that now with our current system.

There is no question that ADSB will move us into a more cost effective (overall) and arguably safer environment than we have now. The safety benefit is emphasised by CAA, but we are still mandated to install a 406-emergency locater beacon. That is our fail-safe and is a direct benefit to the user who is in this case is the pilot /operator of the aircraft. That is fair use of the user pays principle and GA do not argue about the cost of that. We could argue that it can be done cheaper by other means. If you want to be tracked, it would be better to buy a "track me Spot" or other similar satellite monitored device like Spider Tracks. It would be much cheaper and would be monitored down to ground level in uncontrolled airspace over the entire country.

Most GA VFR flights are outside controlled airspace, which is not monitored by the ANSP. The supposed increased coverage of the ADS-B system over the SSR system is quoted as being 45% greater than our current radar. However, it has been measured at 9,000 feet. That is controlled airspace and probably at least 6,000 feet above normal GA VFR traffic.

The following is a simple businessman's view of how it could be done.

Airways NZ provide the Air Navigation Infrastructure. One would assume they have allowed for the replacement of the radar over the last 20 years. They knew it had a limited life span so theoretically they should have a sum set aside to replace it.

Now it becomes a simple matter of capital expenditure for infrastructure. We have shown the proposed GA VFR aircraft part of the ADS-B expenditure is around $20M. If this is funded as Airways NZ capital expenditure, they would expect a 7% return on the investment which equals $1.4m per year. Then the capital borrowed or injected by the shareholder should be repaid over say 10 years which equals a further $2.0m per year.

Giving a total annual cost of $3.4m per year to be recovered from the users (all the users).

Airways revenue from their NZ ATC customers is around $200m per year and the airlines reportedly contribute 98% of that figure. This is passed on to the travelling public as the end user.

It is worth noting here that for the year ended 2018, Airways NZ passed a $3.8m reduction in charges to the airlines as a result of cost savings. (I certainly did not notice any reduction in my air fares).

Airways NZ paid the Government a dividend, out of tax paid profit, of $11m last year which was 40% of the declared NPAT. This goes into the consolidated fund. Why would you then pass that dividend back to GA via another government entity like MoT when it has had tax paid on it?

If we add the extra $3.4m per year expenses for the ADS-B GA VFR equipment, to last year's Airways NZ published figures of $58.7m earnings before interest, tax, depreciation and amortisation (EBITDA) it will reduce the EBITDA to $55.3m. The NPAT will now be about $1.8m less than what it was. So, using the 40% dividend pay-out, that means that the government would will still get a dividend in excess of $10m.

OK, the accountants and boffins will have a field day with this simplistic view of the world but whichever way you look at it this is capital expenditure, on essential National Infrastructure and should be funded as such.

That is why NZAF believe it is unfair and unreasonable to expect GA VFR to replace their fully functional transponders so that Airways NZ can save an equivalent amount in replacement infrastructure.

To make sure it is clear, let's repeat the opening statement.

The NZ Aviation Federation cannot support the proposal for GA VFR ADS-B below FL245 without the capital cost being shared across all users of the aviation system.

Membership changes

Antony Kindon	Canterbury Recreational Aircraft Club	Novice	Joined
Duncan Macdonald	Gyrate Flying Club	Intermediate	Upgrade
Stephen Butler	Auckland Recreational Microlight Aircraft Club	Advanced National	Upgrade
Marcel Huth	Opotiki Aero Club	Advanced Local	Upgrade
Kevin Maurice	Gyrate Auckland	Novice	Joined
Jason Boyle	Stratford Sport Fliers Club	Novice	Joined
Arthur Warner	Gyrate Flying Club	Advanced National	Upgrade
Robert Donderwinkel	Matamata Aero Club	Novice	Joined
Cody Giesen	Feilding Flying Club	Novice	Joined
Robert Bargent	Canterbury Recreational Aircraft Club	Novice	Joined
Paul Coetzee	Associate	Advanced National	Joined
Rebecca Clark	Wairarapa Ruahine Aero Club	Novice	Joined
Alesha Tomasi	Associate	non-flying	Joined
Alan Davidson	Fiordland Aero Club	Novice	Joined
Bryan Flanagan	Eastern Bay of Plenty Microlight Club	Novice	Joined
Grant Nordick	Bay of Plenty Microlight Assn	Advanced National	Upgrade
Jassowal Singh	Mercury Bay Aero Club	Novice	Joined
Jacques GagnÃ©	Canterbury Recreational Aircraft Club	Advanced National	Upgrade
Bruce Magee	Canterbury Recreational Aircraft Club	Advanced Local	Upgrade
Victor Bos Caldero	Bay of Islands Aero Club	Advanced National	Joined
Jonathan Lawry	Hawkes Bay and East Coast Aero Club	Novice	Joined
Stephen Chilcott	Mercury Bay Aero Club	Senior Flight Instructor	Upgrade
Basil Areekal Eldo	Waikato Microlight Club	Novice	Joined
Egmont Johannes Stegen	Matamata Aero Club	Novice	Joined
Craig Steele	Eastern Bay of Plenty Microlight Club	Advanced National	Joined

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