

ADSB

How will it affect the NZ VFR GA operator

**ICAO APAC ADS-B Seminar
Christchurch
14th April 2015**

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I am a 2000 hr private, IFR pilot, who has the latest instrumentation and I believe every IFR pilot should have the best GNSS navigator available, meaning a TSO 146 Garmin 430W or better.

This presentation is not about the IFR system but how the proposed changes will affect the VFR GA private pilot who makes up the majority of pilots in New Zealand

Who represents GA in NZ

The New Zealand Aviation Federation has 12 member organisations who represent 10,000 individual members covering all sectors of aviation.

Primarily we represent the “Private Sport and Recreation” sectors.

Aviation New Zealand represents the majority of Commercial GA in New Zealand and they are members of NZAF.

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Some Statistics

**2600 Aeroplanes in NZ including Gliders & amateur built
850 Helicopters**

1070 Microlights but maybe only 50% have transponders

Total NZ aircraft requiring upgrade lets say

3950

Major airliners total about 150 aircraft which leaves

3800 GA aircraft

All requiring new transponders and TSO 146 or equivalent GPS receivers by 2021.

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How much will ADS-B cost GA

Estimates vary but if you take a transponder at around \$3800 plus a TSO 146 Navigator like a Garmin 430W at around \$10,000 plus installation you would be looking at say \$15,000.

Multiply by 3800 aircraft and you get

\$57 million

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But new technology will be developed in time



- Just announced at AEA in Dallas last week the Stratus 1090 ESG by Appareo.
- A Transponder with GNSS receiver included. But not a Navigator.
- Priced at US\$3500 it should be around NZ\$6,000 installed
- For 3800 aircraft that is still \$22.8 million
- We should use a figure of somewhere between those two estimates so say

\$40 million.

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What is in it for GA ?

- We will be able to fly into controlled airspace.
- We will be monitored by surveillance crossing Cook Strait VFR
- We will be able to fly into controlled airports for maintenance or fuel
- Other aircraft with ADSB in or Traffic will see us
- We will be under Surveillance almost wherever we go.

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We do all that NOW

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What are we being offered

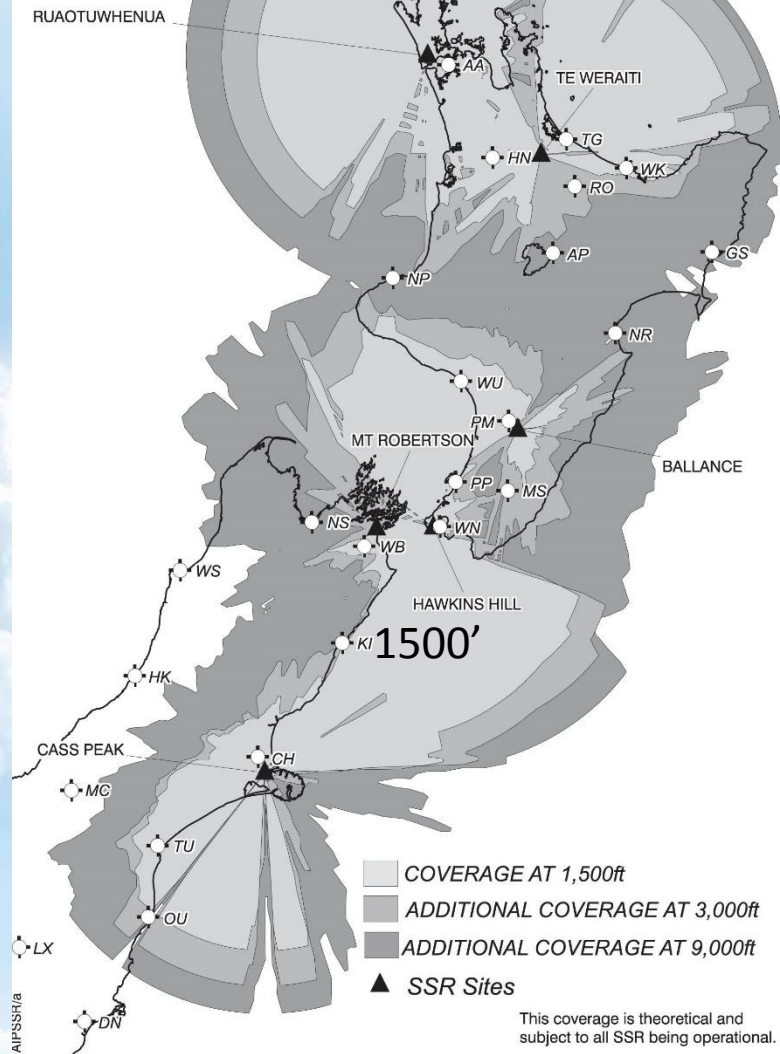
- We are being forced to use TSO 146 WAAS (SBAS) equipment but not being given the full benefit of the technology. (IFR that is)
- We are being offered LESS surveillance area and coverage than we have now with the present radar
- Looking at what Airways New Zealand are planning raises some serious concerns.

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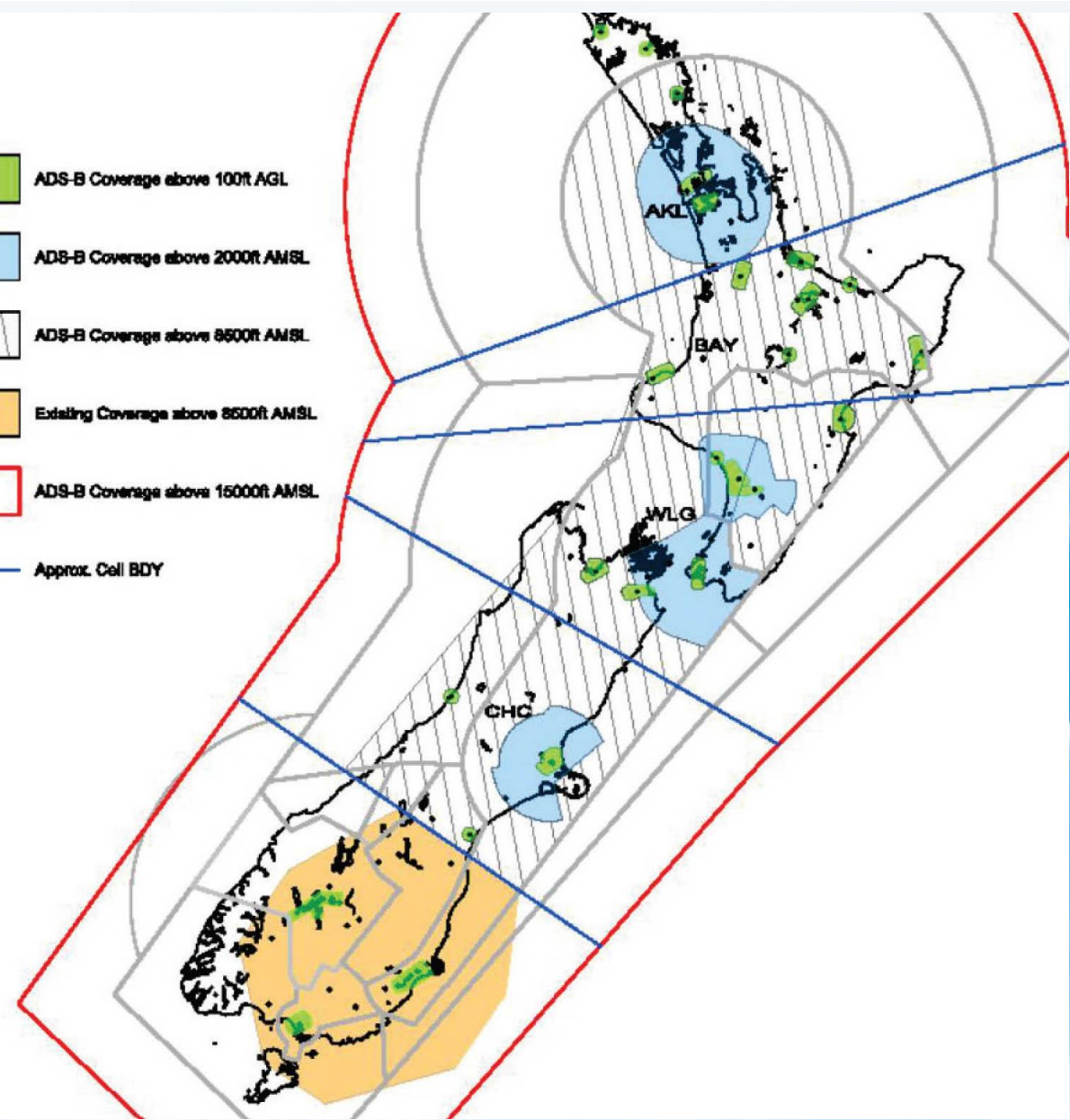
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SSR coverage At present



Above 100
Above 2000
Above 8500
Existing 8500
Above 15000



What do we expect.

- **First and foremost “User Pays”**
- Certainty of what is going to happen. This should have been decided two or more years ago and a funding solution included in that decision.
- Better surveillance if we are going to use ADSB. We can already buy better and cheaper tracking devices than any current mandated system.
- Access to controlled airspace as VFR traffic. See and avoid rules.
- Not to be told at the last minute that we need to find \$6K – \$15K so we can fly back into an airport we just left.

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Finally

- We support the use of new technology and fully support the “New Southern Sky” plan
- We do not expect the taxpayer to pay but we do expect the Government to facilitate a payment process for this upgrade to the present system. It needs to be mandated but needs to be funded.
- GA VFR are not the major beneficiaries of the upgrades and frankly VFR means Visual Flight Rules. See and avoid is just what it says it is.

Thank You

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