**Another 15 lives saved:** When Bryn Lockie was in the USA last year being rated for installing and repacking BRS 'whole-aircraft' (Ballistic) parachutes, he took this photo of the banner in the factory. It must be very satisfying, and motivating for people to do their work carefully, to be saving lives like this.



From April 2011. By April 2012, 15 more lives saved.



BRS 'Whole Aircraft' Ballistic Parachutes

In the 12 months since then, another 15 people have descended safely under the big orange and white chutes, taking the 'total saved' to 276 by April 2012. Flywest Flying School has ordered a BRS chute for its main training aircraft.

There is now a proposal to require whole-aircraft chutes on all Microlights/Ultralights used for training or commercial purposes and it does look like this is something whose time has come, for private use as well as commercial... like airbags in cars, you don't expect to ever use them, but if you do need them, then you *really* do need them.

They cost around \$6000 to \$7000 depending on model for a two seat aircraft and plenty have been deployed at 120 kts plus, with all on board surviving to tell the tale. Systems are available for aircraft of up to six seats, and they are STDed for Cessna 172, 182 and others.

Another factor in the increasing numbers of whole-aircraft parachutes fitted, has been Bryn Lockie's approval to operate repack stations here, the only ones in the Southern Hemisphere. BRS chutes are detachable from the rocket, and only the chute needs to be sent by normal courier to the repack station, which can normally have them back within a week. This is going to be essential if they do become mandatory in some situations, as the aircraft would be out of the air while the chute is being serviced.

Previously BRS chutes had to be sent to the USA for the repacking. Even worse is that some brands of chute (not BRS), still have to be sent to Europe by surface as 'dangerous goods' shipping due to having a permanently attached rocket... giving a 4 month turn around if you're lucky.

BRS deliberately use a smoky rocket propellant as there is no problem in leaving a trail if it is fired, in fact it is probably helpful in drawing attention to the deployment. Because of this smoky propellant the rocket itself is classified as just normal 'dangerous goods' when it needs shipping.

Some other brands use the same smokeless propellant as Rocket Propelled Grenades (RPG)... smokeless makes good sense if you are firing an RPG at a tank, as it is not good for your health to have a trail leading back to your position. But when installed in a parachute system this makes the whole system be classified as 'munitions' with all the complications that causes on shipping with customs and military regulations.

My own plane has a BRS chute fitted, and it is surprising just how much more reassured the family pilots feel when flying over un-landable terrain... better to enter a forest at 12 knots vertically than 45 knots horizontally. Essentially the chute is 'Plan C' for those very rare occasions when both 'Plan A' and 'Plan B' have failed. An immediate benefit is the calming effect on non-pilot passengers, some of whom now admit that they used to wonder, "What do I do if he drops dead on me?". They now know that by pulling the 'Big Red Handle' they can get the thing down in one piece if necessary.