Aviation Safety 2U



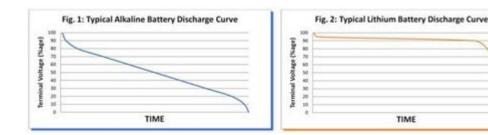


406MHz Batteries – Rewritten compliments of Peter Forey, Sartech UK

"In buying an EPIRB or a PLB the customer has already taken the time and money to understand that it is a vital lifesaving piece of equipment. Just like your life-jacket or life-raft, its sole function depends entirely on the unit working properly when you need it to. Otherwise it was pointless buying it in the first place, adds Forey. The truth is, batteries are manufactured from chemicals that break down over time. They will even degrade without being used and the rate of deterioration depends a lot on the ambient temperature. In most cases replacement is required after 5 years to ensure that there is enough capacity remaining to give the necessary operating time. With regular alkaline batteries (see Fig. 1), it's pretty easy to determine how healthy they are as they decay steadily with time. This is illustrated when switching a torch on and getting a progressively dimmer light. With primary lithium batteries (the type of power source used in all 406MHz products) their decay is non linear (see Fig. below). No 'fuel gauge' has ever been developed to accurately measure Lithium cells and their chemical composition makes it very difficult to determine how much battery life is actually left. We can determine Voltage but even

manufacture, the terminal voltage may remain relatively high. However, there is no way of determining where you are in the battery's lifecycle or how much longer this voltage will remain stable enough to operate the device. Paranoid pushing of the 'test' button will simply decrease battery life further. To ensure that your 406 EPIRB, ELT, or PLB will work perfectly when you need it most, it is best to operate the "test" function no more than once a month and to get the PLB or EPIRB serviced in accordance with the manufacturer guidelines. "It's probably going to be OK to take a gamble on the best-before date on that tin of tuna that's been knocking around in the galley for three years; but don't apply the same mentality to the one thing that could ensure your safety when you need it most. If the worst happens and you do get into trouble we guarantee you will not be thinking about the money you saved by not servicing your PLB or EPIRB," concludes Forey.

Expiry Battery life marked on your 406MHz PLB, ELT or EPIRB should be 50% of the manufacturers stated shelf life with no testing allowance.



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January 2011

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STOP PRESS or **OPINIONS** /

The flood disaster in Queensland this month brings it home to all of us just how life and all our possessions can be taken away in the blink of an eye.

"Life is pleasant. Death is peaceful. It's the transition that's troublesome"

406MHz- NEW Products





SURVIVAL PRODUCTS Life-rafts ex the USA available for purchase. We no longer hire these



Top of the line Non TSO and TSO liferafts The INTEGRA 406 MHz GPS ELT has already been granted ETSO authorisation. COSPAS SARSAT approval is due in the very near future, meaning we will have the new INTEGRA ELT's shortly.

The new INTEGRA 406 GPS ELT is the only ELT in the world that operates on the international 406MHz satellite search and rescue system, (Cospas-sarsat) that integrates an internal GPS and 406MHz antenna. As a result of this technological breakthrough the INTEGRA offers the international flying community a number of major benefits over the standard ELT models that have been available up until now. It will be available in 406AF, AP and AH versions once the



C-S approval comes thru. We anticipate March availability and priced from US909.00+GST

SWITLIK FAA Approved lifejackets – BIG savings still available

Three models are on special while stocks last.

Helicopter Vest with Pockets. (Part 135) Normally \$899.00 <u>Now \$550.00</u> Pilot Vest without pockets (Part 135) Normally \$749 <u>Now \$460.00</u>

Passenger Vest (Part 135) Normally \$599.00 <u>Now \$399.00</u>



www.findmespot.net.nz A simple flight tracking device ?

The Spot Mark 2 is a lot faster in acquiring GPS satellite position and is 30% smaller and lighter. It is available ex stock. Being smaller, the battery life is slightly reduced. It still has all the features such as the OK, Help and 911 buttons and another that you can script yourself. It sends a GPS location in latitude and Longitude by text

and in the simultaneous email, provides you a direct link to a Google map so you can see where they are. A HELP button works the same way. A tracking option is also available, I used it on the Tongariro crossing last weekend. Price \$399.00 incl. GST + registration fee.



406MHz update MEOSAR

COSPAS

Using networks of SAR instruments on satellites and ground processing stations, the ME-OSAR system will receive, decode and locate 406 MHz distress beacons throughout the world. All three MEOSAR constellations will be completely compatible with Cospas-Sarsat 406 MHz distress beacons. MEOSAR satellites orbit the earth at altitudes of around 20,000 km receiving the signals transmitted by Cospas-Sarsat 406 MHz distress beacons. The satellite downlinks are processed by ground

receiving stations, hereafter referred to as MEOLUTs, to provide beacon identification and location information. Each MEOSAR satellite provides visibility of a large portion of the surface of the Earth. Furthermore, because of the large number of satellites in each constellation, and the orbital planes selected, the DASS. SAR/Galileo and SAR/Glonass constellations could individually provide continuous coverage of the entire Earth, subject to the

availability of suitably located MEOLUTs. Each of the three ME-OSAR constellations could support near instantaneous distress alerting, although a short processing time may be required. A feasibility of providing advanced capabilities, which might include a return link to the beacon to support additional functions. MeoSAR will be on stream in 2014

XRX-A Collision Avoidance





Kannad 406MHz ELT's

Kannad 406MHz Compacts ex stock along with a range of whip, rod and blade antennas. Note that antennas are now approved by Cospas-sarsat against each model of ELT so one cannot use an Artex antenna on a Kannad ELT or vica-versa. Antenna breakages are getting less as we have now isolated those aircraft models that are unable to use a whip antenna. The new whip antenna, AV200 appears to be more robust. The Universal



mounting bracket is larger



BT100 406MHz Tester ex stock



PLB Range, – we also hirePLB's

Personal Locator Beacon data GPS & Non GPS Models							
Brand	TechTest	ACR	GME	GME	Kannad	Kannad	
			Current C				
Model	500-12	Microfix	MT410	MT410G	XS-ER GPS	XS-4 GPS	
Weight grams	600	283	235	250	323	150	
Size mm	150 x 88 x 38	149 x 56 x 36	135 x 71 x 38	135 x 71 x 38	146 x 78 x 60	106 x 47 x 34	
Battery interval	5 years	5 years	7 years	7 years	5 years	5 years	
USE	Special c/w voice		Tramping / Aviation	Tramping / Aviation	Multipurpose	Tramping / Aviation	
GPS Channels	Optional	12	0	16	12	50	
NZ\$ incl. GST	\$4,400.00	\$799.00	\$499.00	\$649.00	\$949.00	\$749.00	

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Promoting Aviation Safety



Aviation Safety Supplies Limited is dedicated to improving the

General Aviation Industry within Australasia. We also supply

Law Enforcement, Body Armour, IED Bomb Suits and other

enhanced Night Vision and laser products for Military and

quality of available safety and survival products to the

Tell us who said this and go into a draw to win a multi

www.aviationsafety.co.nz

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CHECK OUR WEBSITES.

www.aviationsafety.co.nz

www.findmespot.net.nz







QUOTE OF THE QUARTER-

purpose knife and tool worth \$50

"I've had a perfectly wonderful evening!

specialist gear.

BUT This wasn't it"



Central Plateau walk





I guess you do it because of the challenge or because it is there! Encouraged by my Stepson and his wife, Jenny & I did some minor training and set out at 0730 on 15/01/11 to walk the Tongariro crossing, 19.4Km. Walk? No tramp or climb is a more apt description. We finished at 3pm and the last 3Km was very long. But, we did it and no, we probably will not do it again. It is incredible the number of people who do it every day. You need good footwear, water and a range of clothing for all weather.

A fascinating landscape and if you have a reasonable fitness, it needs to be on the bucket list, preferably while you are younger :-)



Our Property is still for sale- \$111,000 less than Rateable value We still want to move to Tauranga

Lifestyle with pleasure, no pain

This 8 acre property has extensive gardens, 6 acres of covenanted native bush and situated within 5km of Waimauku village. The home is 400 metres from the road to enjoy and to entertain your friends from. The property is accessed via electric gates. The home has large decks, sunshine all day, indoor / outdoor flow & two wildlife ponds. There is a newly completed self contained living area currently being used to operate a small business from. Broadband is available.









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