



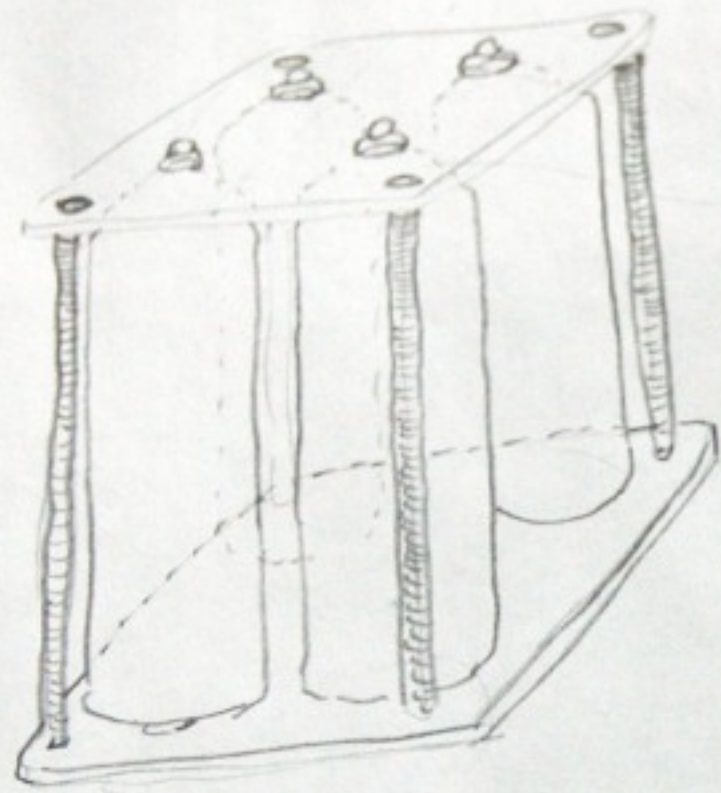
# LiFePO<sub>4</sub> FIELD CASE

The LiFePO<sub>4</sub> batteries are a good option for portable radio operation. They are fairly light and pack enough energy to keep you on the air for a couple of hours. Of course, it depends on the power your rig is sucking out of the batteries, so you might be able to operate for shorter or longer periods. With the Yaesu FT857D, operating at around 35W, we could work for more than an hour at around 0 degrees Celsius (and still had some juice left).

The batteries come in a cylindrical shape, having a diameter of 38 millimeters and a length of 146 mm. We've seen them duct-taped in a pack, but it didn't cut it for us. When portable, especially when activating summits in winter, there's a good chance that sooner or later you're going to slip and fall. Protecting the radio and auxiliary equipment must be a priority, and so we needed some sort of a protective case for the new batteries.

The cylinders were packed in a matrix, side by side, with their ends fastened to two plastic plates (10 by 10 cm squares). The electrical links between the batteries were made from blank copper coated circuit boards (to be improved in the future). To further strengthen the assembly, the plastic plates were fitted at the corners with threaded rods, held together by nuts and washers. The entire assembly was then placed in a plastic box. Another set of plates can be installed on the threaded rods, above the contacts, to protect against short-circuits. The entire case weighs about 1.5 kilos, about 3 kilos lighter than our previous (motorcycle) battery.





Dimensi baterai:  $\phi 38 \times 146 \text{ mm}$

