
CHAPTER 7

7 SUMMARY

The needs of disaster and aid users are in some respects different.

Disaster communicators want something small, light, portable and working now, no awkward if's and buts. They have only 12Hrs notice for planning time and must be on station in 24Hrs. Installations will be temporary, so no installation engineering is needed.

Aid users want something at the camp or office, semi-fixed, reliable and easy to use and hard to abuse, (you can't always tell who will end up using it). The difference is that there is usually some time to plan and engineer the installation. As installations are permanent, then better engineering is desirable.

Technology can do wonderful things for us but at a price. You must ask how much money you want to spend.

If you have USD 10,000 then standard-M with is direct dial convenience and dead easy operation may appeal.

For USD 5,000, Standard-C with its professional reliable Text system and small size may be for you.

Or for USD 1-2,000, HF radio will do a splendid job in the right hands.

Probably the best value for money is in the use of the Gateway service from Portishead Radio by HF radio and using the Phonetext mode, where the problems of time mismatch are obviated.

Planning an adequate Power supply needs much careful thought.

By far the biggest problems you will face will be the political ones. Getting the paperwork wrong will mean failure to be able to use the equipment you have spent so much money on. Make sure you take good advice from the appropriate authorities before attempting to bring anything in to a country.

7.1 System integration

By now you will have realised that operating a communications network is much more involved than it first appears. If you can, then recruit a Radio Officer with varied current experience or radiocommunications specialist to take care of these matters for you. Otherwise, there are consultants who can take care of these matters for you, they will charge you for their services but they will save you money in the long run by improved communications.

Another strategy is to find an organisation like yours, which seems to have a good communications system. You could then either contract their technicians to help you with your network, or just get permission to study and copy their most successful ideas. Another approach may be to a Memorandum of Understanding (MoU). This is a kind of 'contract' in which you agree to use their resources under certain specified conditions in return for some kind of favour.

7.2 Turnkey contracts

This is more for Long term 'aid' projects and not suitable for Emergency comms. Turnkey contracts mean that the contractor will do all the work needed to fix up a working network for you. All you have to do is 'open the door' or 'Turn the key' and step in to a working system.

Here is a warning:

When you order equipment from a manufacturer, he will deliver just what you ordered. He is not a mind reader, remember 'The customer is always right!' so he will faithfully ship out what you say to where you say. We at DRCF have many stories on record from frustrated users and manufacturers alike who shipped out equipment that could not be made to work when the box was opened in Africa.

This happened because the buyers did not specify ALL of the parts needed to turn a basic radio into a working installation. Often there was not a radio technician for hundreds of miles around so already hard pressed staff decided to do without the equipment rather than spend time trying to fix it up.

Even when equipment is installed before shipping, it is often found to be incomplete or unsuitable when arriving in the field because of inadequate quality supervision by experienced specialists. The root cause of that is the shortage of the specialist experts in this vital field.

One way around this is to have your own communications Department⁷² in your group who have someone responsible for all these complex matters. But it is important to recruit the right person for this demanding job.

Another way is use either hired experts from a good consultancy company, or the experts from the dealers of the equipment that you decide to buy.

When you specify a TURNKEY contract from a Systems Integration House, you may gasp at the price you are quoted, but this will be a proper reflection of the true cost of the operation whether completed by you or the dealer. On the other hand, spending money on equipment which didn't work at the moment it was really needed will not go down well in any boardroom, and be a treacherous betrayal of the poor foot soldier at the front end of the job, who will have frustrating equipment inadequacies to add to his other heartbreaks.

7.3 Maintenance

As Murphy's rule so well puts it.. "anything that can go wrong will go wrong". You need to think about repairing and maintaining your system. Your system must be installed correctly in order for the mean time between failures (MTBF) of your system to be respectable. You need to have your system regularly inspected and maintained by competent technicians in order to prevent faults from occurring and when faults do occur, you want fast solutions to get you back on your feet.

In the first response to a disaster situation, this means that you will have to have highly competent technicians 'on call' ready to go out with your equipment in the first line of support staff. They will need to be well briefed, drilled and properly equipped for any installation and repair work they may need to do. In the second line, you will need to have rapid access to the spares needed to bring you back on line again, all of which means preparation in order that stores and spares arriving on the scene are the ones needed and can do the job. In the longer term, you will need to have contracts with a reliable maintenance company, and keep them informed about what type of equipment you have and how it is maintained.

None of this is exciting stuff, but you cannot afford to ignore the frailties of the technology we need for today's operations.

Use technology but don't trust it.

There is nothing more human than a machine.

7.4 DRCF's role

The DRCF can also help with advice and also with men and equipment ready to go out in the field. However our resources are limited at the moment so you may need professional help even after DRCF help has been sought. In the future it is hoped to expand our operation to meet the obvious need vacuum in this field, but we will never replace the work of the dealers and consultants and neither would we wish to.

In DRCF's case, with limited resources, yet a need to be insured against equipment failure and a desire to be most flexible, we have chosen to use Standard-C and HF radio side-by-side. This gives the best of both worlds at the most reasonable cost. Standard-C gives reliable, compact and quick-pop-up service with text hard copy, while HF radio is for phone calls and as back up for the standard-C. Another important reason for not forgetting HF radio is that it may be needed in local mode for contacting other local agencies in the area using only HF radio.

Individual cases though require much thought at the planning stage, so we would always recommend the services of a consultant before spending large amounts of money.

May I wish you 73's, which is radio code for "Best Wishes"

Mark Wood, Stockholm Sweden, June 1996

The Disaster Relief communications Foundation (UK).

⁷²The CICR have such a special department staffed by former Marine Radio Officers for this reason.