RECOMMENDATIONS ON THE USE OF BATTERIES FOR
TWO-WAY VHF RADIOTELEPHONE APPARATUS

1 The Sub-Committee on Radiocommunications, at its fortieth session (16 to 20 January 1995),
considered the use of rechargeable batteries in GMDSS equipment, particularly in two-way VHF
telephone apparatus.

2 From practical experience in the use of portable radiotelephone apparatus and associated battery
packs, the following points were noted:

1. NiCd rechargeable batteries, assembled in battery packs, are in widespread use to power
portable radiotelephone apparatus. They comply with the environmental requirements
on board ships. Battery packs can easily be replaced and charged independently or when
attached to the portable radiotelephone apparatus;

2. battery chargers on the market are suitable to recharge NiCd batteries within acceptable
time periods. For portable radiotelephone apparatus extensively used more than one
battery pack would be required. NiCd batteries regularly discharged and recharged will
require renewal, as a rule of thumb, after one to three years of use;

3. while rechargeable NiCd batteries will satisfy the operational requirement for portable
radiotelephone apparatus during their life-cycle, there are no easy means available to
verify their charging state and capacity when fully charged. Additionally, rechargeable
batteries when not in use cannot be maintained at a fully charged condition and a
specified power capacity for a prolonged period; and

4. rechargeable NiCd batteries when in use cannot comply with a requirement for a
specified power capacity at any given instance. On the other hand, primary batteries can
retain their power capacity for a designated lifetime when not in use. However, when in
use the remaining power capacity cannot be easily determined. Battery packs for
portable radiotelephone apparatus are not standardized but designed to comply with the
requirements of the associated radiotelephone. Battery packs not attached to the portable
radiotelephone apparatus should be stored, ready for use, adjacent to the portable
radiotelephone apparatus.

3 The following recommendations apply to the use of batteries in survival craft two-way VHF
radiotelephone apparatus:

1. Radiotelephone apparatus should have an attached battery pack as its independent source
of energy which may consist of primary or secondary (rechargeable) batteries.
2 Each survival craft two-way VHF radiotelephone apparatus should be provided with an additional (reserve) battery pack equipped with primary batteries located adjacent to the radiotelephone apparatus for use in an emergency. The primary batteries should have a shelf life of at least two years.

3 All primary battery packs provided for survival craft two-way VHF radiotelephone apparatus should have the minimum power capacity to comply with the power supply requirements of Assembly resolution A.762(18), as may be amended - Performance standards for survival craft two-way VHF radiotelephone apparatus and to ensure 8 h operation at its highest rated power.

4 Member Governments are requested to bring this circular to the attention of organizations, shipowners and seafarers and all others concerned.