PAKISTAN

1. REGULATIONS

1.1 General

Nil.

1.2 EPIRBs

All Pakistani ships under SOLAS Convention (Regulation 7) require a mandatory carriage of a 406 MHz beacon. Ministry of Information Technology and Frequency Allocation Board (FAB) under Ministry of Communication issues the standards for all radio equipment onboard foreign vessels and they are authorized to license for all radio equipment.

Ministry of Ports and Shipping issues certificate after satisfactory operation check of the equipment.

1.3 ELTs

The Air Navigation Order (ANO-007-AWRG-3.0) on aircraft instruments, equipment and documents for flight is issued by Director General Civil Aviation Authority in pursuance of Rules 4, 5, 180, 248, 252, 253, 334 (3), 360 and all other enabling provision of Civil Aviation Rules 1994 (CARs 94). In addition to the minimum equipment necessary for the issuance of a Certificate of Airworthiness, the instruments, equipment and documents prescribed in the Air Navigation Order shall be installed or carried, as appropriate, in aeroplanes/helicopters according to the aeroplanes / helicopter used and to the circumstances under which the flight is to be conducted. The ANO is applicable to all air operators involved in operation of aeroplanes / helicopters in Pakistan.

As per provision of ANO, all aeroplanes/helicopters for which the individual certificate of airworthiness was first issued after 1 January 2002, operated on long-range over-water flights, shall be equipped with at least two ELTs, one of which shall be automatic. Until 1 January 2005 all aeroplanes/helicopters, when operated across land areas which have been designated by the CAA as areas in which search and rescue would be especially difficult, shall be equipped with at least one ELT.

All aeroplanes / helicopters for which the individual certificate of airworthiness was first issued after 1 January 2002, on flights over designated land shall be equipped with at least one automatic ELT.

Note 1: Since 1 January 2009, ELTs are operable on 406 MHz & 121.5 MHz frequencies, in case of General Aviation Operator.

Note 2: ITU Radio Regulations (S5.256 and Appendix S13) provide for the use of 243 MHz in addition to the above frequencies.
1.4 PLBs

1.4.1 National Beacon Regulations for Serial-Coded PLBs

<table>
<thead>
<tr>
<th>Administration</th>
<th>For Terrestrial Applications</th>
<th>In Maritime Environment</th>
<th>On Aircraft</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Country Recognises PLB Activations</td>
<td>Country Recognises PLB Activations</td>
<td>Country Recognises PLB Activations</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Similar information is available in the new table on the Cospas-Sarsat website (www.cospas-sarsat.int) with the status indication in colors (Y = green, allows / N = red, not allowed / Restrictions = amber (see comments) and with the note that the national beacon regulations can be found on the Cospas-Sarsat website in document C/S S.007).

2. BEACONS CODING METHODS

2.1 EPIRB Coding Methods

<table>
<thead>
<tr>
<th>Country Code</th>
<th>USER PROTOCOLS</th>
<th>LOCATION PROTOCOLS</th>
<th>RLS (Return Link Service)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maritime User</td>
<td>Serial User</td>
<td>Radio Call Sign</td>
</tr>
<tr>
<td>MMSI</td>
<td>Radio Call Sign</td>
<td>EPIRB with Serial Number</td>
<td>Radio Call Sign</td>
</tr>
<tr>
<td>463</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

2.2 ELT Coding Methods

<table>
<thead>
<tr>
<th>Country Code</th>
<th>USER PROTOCOLS</th>
<th>LOCATION PROTOCOLS</th>
<th>RLS (Return Link Service)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ELT with Serial Number</td>
<td>Aviation User</td>
<td>User Location</td>
</tr>
<tr>
<td>MMSI</td>
<td>Aircraft Operator Designator and Serial Number</td>
<td>Aircraft 24-bit Address</td>
<td>Aircraft Nationality and Registration Marking</td>
</tr>
<tr>
<td>463</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Notes: (1) If national serial numbers are to be used, the Cospas-Sarsat Type Approval number (TAC) should NOT be inserted and bit 43 should be set to "0". If the TAC No is to be inserted, bit 43 should be set to "1" and the manufacturer's serial number of the beacon used.

(2) If programming the ELT with the aircraft registration marking do not insert extraneous characters such as '/1' or '/2' after the aircraft registration marking to indicate multiple ELTs on board the same aircraft.

(3) Do not program an ELT as another beacon type of EPIRB or PLB.

(4) An ELTs installed in an aircraft connected to a dongle must ensure the Hex ID programmed into the dongle matches the ID coded in the ELT and vice versa.

(5) Any changes in coding should be carried out by beacon manufacturer.
2.3 PLB Coding Methods

<table>
<thead>
<tr>
<th>Country Code</th>
<th>USER PROTOCOLS</th>
<th>LOCATION PROTOCOLS</th>
<th>RLS (Return Link Service)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Serial User</td>
<td>User Location</td>
<td>Standard Location</td>
</tr>
<tr>
<td>PLB with Serial Number</td>
<td></td>
<td>PLB with Serial Number</td>
<td>Serial Number Assigned by Competent Administration</td>
</tr>
<tr>
<td>463</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

3. LIST OF BEACON MODELS TYPE APPROVED BY ADMINISTRATION

3.1 Pakistan has a policy of self-regulation with regard to meeting the requirements of the emergency beacons. ELTs for sale in Pakistan are required to comply with Pakistan Civil Aviation Authorities Regulations.

3.2 ELTs used in aircraft are of the following types:

The new 406 MHz TSO-126 ELT is the only type of ELT detected by Cospas-Sarsat after 1 February 2009.

3.3 Types Being Phased Out:

TSO-C91 - 121.5 / 243 MHz unregistered - have not been permitted for new installations since June 21, 1995;

TSO-C91a - 121.5 / 243 MHz unregistered – was the replacing standard; most current aviation ELTs are of this type.

3.4 ELT sub-classification

ELTs for aircraft may be classed as follows:

- A ELT, automatically ejected,
- AD ELT, automatic deployable,
- F ELT, fixed,
- AF ELT, automatic fixed,
- AP ELT, automatic portable,
- W ELT, water activated,
- S ELT, survival.

4. BEACON TESTING REGULATION

4.1 In rare circumstances, there may be a need to activate a 406 MHz beacon in its operational mode for test or training purpose. Regardless of the beacon’s location or the duration of activation, a 406 MHz beacon would be detected by at least one or more ground receiving
stations. The resulting distress alert message would be routed to every MCC in the Cospas-Sarsat System.

4.2 Request to conduct a live beacon test should be directed to the PAMCC. When making a request the following information should be provided:

- Objective of the test,
- Description of the test,
- Location of the test,
- Date, time and duration of the test,
- Beacon 15 hexadecimal ID,
- Point of contact for the test.

4.3 Activating a beacon for reasons other than to indicate a distress situation or without the prior authorization from a Cospas-Sarsat MCC is considered an offence in many countries of the world, and result in prosecution.

4.4 If a beacon is inadvertently activated in its operational mode the PAMCC should contact its associated RCC as soon as possible.

5. POINT OF CONTACT FOR BEACON MATTERS (CODING, REGISTRATION AND TYPE APPROVAL)

The points of contact for beacon matters are:

- EPIRBs, ELTs, PLBs (registration): PAMCC,
- Operations: Rescue Operation Centre (RCC) / Pakistan Civil Aviation Authority.

Updated point of contact details for administrations are available at: https://www.cospas-sarsat.int/en/contacts-pro/contacts-details-all.

6. BEACON REGISTRATION

6.1 Regulation

Whenever, a beacon or aircraft/vessel containing a 406 MHz beacon (ELT/EPIRB/PLB) is purchased by an entity in Pakistan, it must be registered in databases with IBRD and the Pakistan Mission Control Center (PAMCC).

The ELT/EPIRB/PLB registration database is maintained by the PAMCC. In addition, if an emergency beacon is replaced or becomes obsolete, this information should be provided to PAMCC to ensure up to date info in the database.

Further information about distress beacons and conditions of carriage can be obtained from PAMCC at Karachi.
All enquiries about distress beacons in Pakistan region can be directed to PAMCC, SUPARCO HQs at Karachi.

6.2 Forms

Online beacon registration forms (appropriate website address) are not available.

- END OF SECTION -