REPORT
Deputy head of the regional authority
State Advisor of the Russian Federation 3 classes
V. Tereshkova

The topic:
«The practical use of automated information System operational search and rescue using the resources of space search engine emergency vessels and aircraft in the Krasnoyarsk region»
Orbital Grouping System
COSPAS-SARSAT

6 Satellites in polar orbit
5 satellites in geostationary orbit
Rescue people in emergencies

Currently, the number of rescued using the COSPAS-SARSAT system - more than 27 thousand people.

In 2000, COSPAS-SARSAT Council decided on the extension of the system for personal buoys (PWB). Currently, over 12 countries have adopted the necessary laws governing the use of PWB.

The number of saved using PWB in 2010. It amounted to 10% of the total number of rescued.

For Russia, which has about 60% of the territory without reliable and affordable communication, use PWB is one of the urgent tasks for the rescue of people in emergency situations.
Transmission and display of information from the ARB COSPAS-SARSAT in the Main Department of EMERCOM of Russia in Krasnoyarsk region

- Reporting of massages about ARB in the Main Department of EMERCOM of Russia in Krasnoyarsk region on the dedicated Internet channel technology, adopted by the COSPAS-SARSAT system;
- Receiving and storage information from the ARB database;
- Operational display on a map the location of the ARB.
Geographical position

Arctic zone of the Siberian region
ALARM COSPAS-SARSAT SYSTEM

Transfer time: 25.07.2010  22:04 UTC
From: MKVTS RUSSIA
To: SRP (MSS) RUSSIA
1. Ambiguity resolution coordinates
2. Number of posts: 16581 the ARB ID: 223637D5BF81FE0
3. Detected: 25.07.2010 22:00 UTC IC3: SARSAT S09
4. Frequency: 406,0275 MHz
5. Country the ARB registration: 273 / Russian Federation
6. User class: PWB - SERIAL NO: 028587
7. Alarm code: 2
8. Coordinates: Ambiguity resolution - 77 41 '36' 'N 104 27 28 '' V.D.- from a geostationary satellite
1st of Doppler - 77 25 '08' 'N 109 46 '03' 'E. The probability of 80% - from the low-flying satellites;
2nd of Doppler - NO 0% probability
GPS-GLONASS-Galileo coordinates - 77 41 '36' 'N - 104 27 '28' 'V.D.- from geostationary sputnika- final report
9. GPS-GLONASS-Galileo coordinate obtained from: INTERNAL DEVICE- from Parbo

Information from the registration database:
1. Name of owner: Siberian Regional Emergency Center of Russia (Tereshkov Valery Ilich was born in 1955, a passport is issued 0403937278 02.02.2008, the railway police department of Krasnoyarsk, Krasnoyarsk Territory, blood type III +)
2. Address: Krasnoyarsk, ul. Matrosov 42.
3. Contact us in case of emergency: 83912273438.
4. Note: The test registration
Information materials software tourist routes in Krasnoyarsk Region

<table>
<thead>
<tr>
<th>Krasnoyarsk region</th>
<th>All trails</th>
<th>Hiking trails</th>
<th>Equestrian and hiking trails</th>
<th>Mountaineering</th>
<th>Water trails</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

Conventions:
- Hiking trails
- Water trails
- Equestrian and hiking trails
- Mountaineering
• Space System for Search of Vessels in Distress (COSPAS-SARSAT) is designed for the detection of ships, aircraft and persons in distress anywhere in the world, receiving an alarm message and identify with a given precision coordinate disaster site in order to significantly (up to 10 times) reduction of the time of the search operations as compared with traditional methods.

• For the Krasnoyarsk region has a large number of tourist routes of high complexity, sparsely populated areas and large water area of rivers, lakes, creating an effective system search and rescue is important.
The results of the system COSPAS-SARSAT from 1982 to 2014

<table>
<thead>
<tr>
<th>The Title</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Number of people saved since 1982</td>
<td>&gt;37000</td>
</tr>
<tr>
<td>3  Number of low-orbit satellites with 406 MHz processors</td>
<td>6</td>
</tr>
<tr>
<td>4  Number of geostationary satellites with transponders ARB-406</td>
<td>5</td>
</tr>
<tr>
<td>5  The number of ground stations for low-orbit satellites</td>
<td>57</td>
</tr>
<tr>
<td>6  The number of ground stations for geostationary satellites</td>
<td>21</td>
</tr>
<tr>
<td>7  The number of national centers</td>
<td>30</td>
</tr>
<tr>
<td>8  Number ARB-406</td>
<td>1150000</td>
</tr>
<tr>
<td>9  The number of search operations since 1982</td>
<td>8868</td>
</tr>
<tr>
<td>10 The number of countries and organizations participating</td>
<td>41</td>
</tr>
</tbody>
</table>
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THANK YOU FOR YOUR ATTENTION!