

Shaftesbury Overhead Amateur Repeater 1 (SOAR-1) Pre-flight Announcement to the Radio Amateur Community

The amateur radio community is invited to participate with the Shaftesbury High Altitude Robotics Project (SHARP) on SOAR-1, SHARP's first high altitude cross band amateur radio FM repeater. The launch of the repeater on a 1200 gram weather balloon will take place on Friday, April 24th, 2015 at 11:00 AM from Morden Collegiate in Morden Manitoba.



The high altitude balloon (HAB) is expected to reach an altitude of just over 100,000 feet or 30 kilometres during its 105 minute ascent. The balloon will take another 20 minutes to parachute back to earth with a landing near Morris Manitoba. During the mission, Shaftesbury students will track and chase the balloon using the Automatic Packet Reporting System (APRS).

SOAR-1 will carry the following ham radio payloads:

- Puxing UV-973 Crossband Repeater, Uplink 146.520 MHz Downlink 446.100 MHz
- GPS Downlink - 144.39 MHz using the call sign **VE4SHS-9** squawking position and altitude every minute. (Other HABs may be in the vicinity.)

Between 12 and 12:30 PM, the communications range of SOAR-1 will be approximately 500 to 700 kilometres. Hams from Saskatchewan, Manitoba, Northwestern Ontario, North Dakota, and parts of South Dakota and Minnesota are invited to communicate with Shaftesbury students in the chase vehicles and other hams using the balloon's crossband repeater. SHARP students will attempt to coordinate operations and record the QSO's hopefully from ever increasing ranges.

Shaftesbury students will attempt to evaluate SOAR-1 based on the location and type of stations making QSOs or contacts. **Radio amateurs please call on 146.520 MHz between 11AM and 12:30 PM on Friday, April 24th.**

Please check the SHARP website for updates <http://shsballoonproject.pbworks.com> .