Dear Colleague:

The second landing site workshop for the 2009 Mars Science Laboratory (MSL) will be held at the Courtyard Marriott in Old Town Pasadena, CA, on October 23-25, 2007. The format will include oral presentations and general discussion of the proposed landing sites. Each site will be represented by a single speaker or science spokesperson at the workshop. Presentations are also solicited on the safety of the landing sites and how well they conform to the engineering requirements.

The primary goal of the second workshop will be to evaluate the 33 sites that emerged from the first workshop as well as any new sites proposed within the framework provided by new Mars Reconnaissance Orbiter (MRO) data for the sites, the science requirements of the MSL mission, and a better understanding of the MSL engineering requirements and the safety of the landing sites relative to these requirements. ***Presenters at the workshop must make a comprehensive, persuasive talk on why a site is the right one for the MSL mission and payload, including an assessment of the engineering criteria (where possible) so that each site can be comprehensively and fairly assessed.***

The MSL project has recognized the need for a strategy to ensure that the science value of the landing site is not unnecessarily compromised when faced with late-breaking threats to EDL, degradation in rover surface performance, or failure of high-priority sites to meet the nominal engineering constraints. Sites presently known to meet a higher safety standard can be considered "safe havens" and are sites that can serve as backups or conservative selections while still maintaining high value science. Accordingly, we are specifically requesting the proposal of "safe haven" sites at the second workshop which must meet a more restrictive set of engineering constraints (see Section 4 of the User's Guide, http://marsoweb.nas.nasa.gov/landingsites/ and http://webgis.wr.usgs.gov/msl) . Safe havens have larger landing ellipses, so these sites cannot be “go to” sites and instead must have high science value targets within the ellipse. Ideally, "safe haven" ellipses would be identified for all primary science sites, in addition to, or replacing, the current ellipses. If safe haven ellipses cannot be found near a primary science site, the project may have to carry the best available safe haven ellipse at a similar latitude band to the primary (the exact bands are TBD depending upon final Mars arrival constraints) as a backup option. In the latter case, the scientific value of the available safe haven may influence the selectability of the primary site.

Persons wishing to make presentations at the workshop should consult the “Information to Presenters” on the web sites. Persons wishing to propose a new landing site and/or “safe haven” landing sites must consult mission science and engineering requirements (see the User’s Guide at http://marsoweb.nas.nasa.gov/landingsites/ and http://webgis.wr.usgs.gov/msl). A short summary of any new sites should be provided to both John Grant and Matt Golombek (co-chairs of Landing Site Steering Committee) no later than September 21, 2007. The third announcement for the second landing site workshop will include the scheduled talks and be distributed in early October 2007.

Based upon revision of the MSL landing site selection schedule, we expect the list of sites under consideration to be narrowed to approximately five at the end of the second workshop. These sites will then be considered in more detail by the MSL Project, Mars Program, and the Science Community with the expectation that additional orbital data will be obtained. Future workshops are planned that would further narrow the list of sites under consideration to a recommended landing site zone and (eventually) precise landing ellipse.

A number of websites provide access to more information on the MSL mission, relevant engineering requirements, landing site selection process, and available data for the proposed sites. Please note there are a number of important changes to the engineering constraints since the first workshop that include a decrease in the latitude range and altitude to between +/-45^0 latitude and below 1 km MOLA-derived elevation, respectively. Websites where this information, a description of the site selection process, and outcomes of the first workshop are posted are:
http://marsoweb.nas.nasa.gov/landingsites/
http://webgis.wr.usgs.gov/msl

Additional images and derived data products relevant to the MSL site selection process can be viewed at:
http://marsoweb.nas.nasa.gov/HiRISE/hirise_images/ (HiRISE)
http://themis.asu.edu (THEMIS daytime, nighttime IR, VIS, and thermal inertia mosaics)
http://themis.asu.edu/landingsites/ (Decorrelation stretched THEMIS daytime mosaics)
http://www.msss.com/mars_images/moc/guest/ (MOC)
ftp://psa.esac.esa.int/pub/mirror/MARS-EXPRESS/HRSC/ (HRSC)

Descriptions of the MSL mission and a summary of NASA's Mars exploration strategy are available at:
http://mars.jpl.nasa.gov/msl/overview
http://mars.jpl.nasa.gov/mep/mslides/index.html
http://mepag.jpl.nasa.gov/reports/index.html.

All members of the scientific community are encouraged to participate in the MSL site selection process, as input from the science community is critical to identification of optimal landing sites for the MSL. We look forward to your continued involvement in these activities!

Sincerely,
John Grant and Matt Golombek
Co-Chairs, Mars Landing Site Steering Committee