SPACE 365: AN APP CONNECTING YOU – AND YOUR AUDIENCE – TO SPACE. S. H. Williams¹, NASA Planetary Science Division (detail), NASA HQ, Mail Suite 3X54, 300 E Street SW, Washington, DC 20546, steven.williams@nasa.gov; permanent address: Education Division, Smithsonian Institution, National Air and Space Museum, Washington, DC.

Introduction: An app called "SPACE 365" has been created to help learners/educators of all descriptions keep track of Space exploration-related events, along with other events, birthdays, etc. to provide socio-historical context. It allows the user to search the app database by year, date, keywords, subject categories, and other parameters; share with others, and even query the app SME. Many of the Space-related entries have an associated NASA image and one or more links to external information sources. SPACE 365 is available at no cost, in both Android and Apple formats, from the usual sources.

Background: The need to enhance both formal and informal STEM education efforts is as great as it is well-documented. Alas, STEM educators often must operate in a very under-resourced environment. A similar situation is faced by those wishing to use Space exploration-related items in strategic communications. How can STEM/communication efforts be supported effectively under such limitations? The good news is that Space exploration-related items engage the learning potential of a very diverse audience. Therefore, an obvious suggestion would be to enlist the help of others by tying education programming and other efforts to topics/events that would attract both media and public attention anyway. The idea is to get information about items linkable to Space exploration into the hands of creative people who would then use their talents to add to the information's utility in ways that may or may not have been foreseen by the database creators.

Examples: A number of opportunities to align programming/messaging with historical events have occurred of late.

December 14, 2012: The 50th anniversary of the first successful planetary mission, the fly-by of Venus by Mariner 2, occurred on the same exact day as the 40th anniversary of the making of the last (for now) fresh human footprint on the Moon. Either might attract public/media attention on their own, but together, they make a particularly engaging item. This coincidence was used to enhance programming relating to the 50th anniversary of the exploration of the Solar System.

GRAIL launch: The original GRAIL launch date (8 September 2011) was also the 45th anniversary of the premiere of the original Star Trek series. Advanced knowledge of that co-incidence allowed for the extension of a Star Trek-themed exhibition, already at the Kennedy Space Center Visitor Center, through the

launch date and the arrangement of a personal appearance by Nichell Nichols, who played Lt. Uhura in that series. That linkage allowed for a *significantly*-higher level of media and public attention than the event would have otherwise attracted.

March 3, 2012: Less utilized was a co-incidence of dates a year ago, associated with the 100th anniversary of the discovery of the Cepheid variable period-luminosity relationship, still a fundamental astronomical "yardstick," by one Henrietta Leavitt at Harvard College Observatory – a pioneering discovery by a gender pioneer in a male-dominated field. March 3 was also the 40th anniversary of the launch of the Pioneer 10 spacecraft, the first to reach Jupiter, and the 53rd anniversary of the launch of Pioneer 4 (the first US spacecraft to fly-by the Moon). And March is Women's History Month, to boot. Little, if any, Spacerelated E/PO programming took advantage of this remarkable set of pioneer-themed co-incidences.

February, 2013: Black History Month of 2013 contains a number of historical events that could enhance STEM programming and program promotion. How will/did Rosa Parks' 100th birthday (2/4), Michael Jordan's 50th (2/17), and the first anniversary of the untimely passing of Whitney Houston (2/11) in that month affect public and media attention, especially in a year that will see the 50th anniversary of the "I Have a Dream" speech, and the 150th of the Gettysburg Address?

Upcoming Anniveraries/Coincidences: A variety of anniversary events occur in 2013 to which Spacerelated STEM programming and promotion could be tied:

- 40th: Launch of *Skylab*
- 40th: First fly-by of Jupiter
- 50th: Tereshkova becomes first woman in Space
- 55th: Launch of first USA satellite (*Explorer 1*)
- 75th: "Wrong-Way" Corrigan's flight
- 75th: Orson Welles' *War of the Worlds* broadcast
- 100th of Goddard receiving first rocket patent
- 150th birthday of astronomer Annie Jump Cannon

So how then can one keep timely track of these and other upcoming calendar events to which programming/messaging (and its support by others) be tied? Well, there is an app for that!

Uses of SPACE 365: Not only can the SPACE 365 database and search function be used to examine the events of a specific anniversary year (e.g. searching on

"1963" to get all listed 50th anniversaries in 2013), the user can restrict their search to a specific day of the year (*e.g.* their birthday or the date of an event they want to support), or search on key words or subject categories. Not every item in the SPACE 365 database will be useful in all contexts, but advance knowledge of opportunities is an essential part of using the engaging value of Space exploration topics to maximum effect. SPACE 365 is a quick and fun way to plan events, place events in a larger historical context, and spice up existing education/communications items.