American Meteorological Society
“Communicating Space Weather Information through the Media”

Summary of key points from an informal workshop hosted by the AMS on October 23, 2014

General Observations and Challenges

1) Space weather is inherently of interest to the average citizen primarily due to the successes of the long-standing US space program. Visible impacts, such as the aurora borealis, are spectacular and fascinating. However, space weather phenomena and terminology are complicated and are not familiar to the public. It will take considerable education to improve this familiarity. The broadcast and Internet media are well-poised to help make such improvements.

2) When the research community refers to a “Carrington event” they are referring to a similar event in space and not necessarily the impacts on the Earth. An analogy would be referring to the intensity of a Category 3 hurricane and not necessarily its impacts upon landfall (not all hurricanes reach land). Further, there are three different space weather storms (radio blackouts, solar radiation storms, and geomagnetic storms) and these have different impacts upon the Earth (radio/GPS disruption, aurora, etc).

3) After space weather products are issued, it may appear that “nothing happened” when, in fact, impacts did occur and existing mitigation strategies were effective (e.g., navigation systems on commercial airlines have multiple back-ups). Reporting such impacts and mitigation strategies could be of interest to the media provided that undue fear or sensationalism is not the result. The happy medium between what is the right balance of what a news outlet should report versus creating “white noise” for the public is not well-understood today and needs to be determined by the space weather community.

4) Today, the media obtains space weather information from a variety of sources: government press calls and webpages, space weather Twitter feeds, spaceweather.com, space.com, Facebook pages, etc. While this is common and acceptable, it would be advantageous for the SWPC to update information on its webpage as often as possible in order to provide the most timely and useful information for the media.

5) A prevailing question is, “Does the average person care about space weather when the impacts do not impact their daily lives?” The answer is probably, “Yes” given the well-documented and long-standing interest in terrestrial weather. Space weather is a relatively new field, but the public simply and obviously is less-informed today than with terrestrial weather. The practice of making space weather impacts dramatic is inaccurate and ill-advised – and not necessary. For example, while a weather forecast of “Sunny and 80°F” is relatively benign, the public does care because it impacts their daily lives. Educating the public on space weather, in a factual and informative matter, is a practical first step in improving space weather communications by the
media. All facets of the space weather enterprise (government, academic and private sectors) have an important role to play in this endeavor.

**Opportunities for Improving the Communication of Space Weather Information via the Media**

1) NOAA and NASA should develop a short summary document (“2-pager”) on space weather for the media. The document should include the roles of the agencies: NASA provides space weather observations and research and NOAA provides operational observations and the official space weather forecast. A timeline of the space weather forecasting process should be developed and included.

2) Agencies should package space weather information, including graphics, so that the media can easily portray the information to its viewers. Apps are likely to be very useful in this regard. NOAA/SWPC should work with media contacts to improve its new media webpage. Sound bites and “B-Roll” should be made available for media outlets.

3) Consider a 3 step approach: Step 1 (say that an event is approaching), step 2 (when closer, discuss potential impacts), step 3 (when it’s highly likely that the event will impact Earth, discuss possible actions). Further, provide “key messages” to the media when there are space weather events. Determine what the media should communicate to the public about space weather and the risk. For example, rather than reporting “communications over the Atlantic will be out” one could say “alternate communications will be used over the Atlantic during this event.” In addition, it would be useful to provide statistics on space weather, similar to how SPC or WFOs provide comparisons to other events when there is a tornado, for example. Electrical grid vulnerability could also be provided in an easily accessible format.

4) The role of the station scientist can be very significant and advantageous in educating the public on space weather. The AMS station scientist web page could have POCs for space weather listed. The station scientist can help to reach out to the broader media outlets, too, like the AP news wire. Also, the space weather enterprise should consider talks, sessions, and short courses on space weather at the AMS Broadcast Conference. NOAA should include AMS broadcasters on its NOAA communication email list.

(end //// 11-24-14 Matt Parker & Genene Fisher)