Tips from the Board of Broadcast Meteorology for Gaining the Certified Broadcast Meteorologist (CBM) Designation (Updated September 2019)

Overview

These notes are intended to maximize the likelihood that you will pass the AMS CBM evaluation on your first attempt. Typically half of first-time applicants pass the evaluation.

There is no minimum on-air experience necessary to apply for the AMS CBM, but weathercasters do improve with experience. It is generally advisable to have 1-2 years of onair experience before applying, although less experience is no guarantee that you will fail, nor is more experience a guarantee that you will pass. A friend who has already earned the AMS CBM can provide guidance as to when you are ready to apply. A positive informal review by a friend with the AMS CBM will not guarantee a passing grade by the Broadcast Board members who review your weathercasts officially, but it is useful nonetheless.

Since you select the weathercasts that are submitted, the Board will assume that these represent your best work. Therefore, make sure they are! If you are marginal in a particular category, the benefit of doubt will go against you, because the Board will assume that weathercasts from other days are no better.

TV meteorologists often work under various restrictions and requirements imposed by those in authority at their stations. Please mention all of these restrictions when you submit your weathercasts so that the panel can take into consideration when evaluating your work. For instance, if you cannot show a time stamp on your radar loop, or you are forbidden from showing the almanac within your weathercast, letting the panel know of these restrictions will give them a better sense of why certain elements were or were not within your weathercasts.

All actively employed meteorologists MUST submit on-air weathercasts. "Off-air" weathercasts will only be accepted from applicants not currently employed. In this case, to better simulate the "on-air experience," a single take with no post-production is required, and it must be recorded with current rather than archived data. If preparing simulated weathercasts, please make them 3-4 minutes for each day and aim them at a general audience, not the AMS Broadcast Board. Present the kind of weathercasts you wish you could air for the general public if you operated under no restrictions other than time. When submitting off-air weathercasts for evaluation, include the specific reasons why the option is being used (e.g. employment status.). Failing to do so will adversely affect your application.

As you watch current CBM holders to determine what is necessary to earn a CBM, you should not assume that everything they do is ideal because they themselves may be working under some restrictions or requirements that they wish they could change.

There is no minimum or maximum duration for the weathercasts you submit. Nonetheless, it is often difficult to

include adequate explanations if you have less than roughly two and a half minutes per weathercast, and reviewers prefer to see no more than 5 minutes for each day. Whether your weathercasts are short or long, time must be managed carefully. Those whose weathercasts are short in time, but frequent in number (morning shows, cable news, etc.), may wish to include several consecutive segments, that approximate a single "full weathercast" when combined, for each day. Anyone exercising this option must clearly state such when submitting their weathercasts.

Submissions should include any "tosses" at the beginning and end of each weathercast and should exclude commercials. Before sending your submissions, make sure that the audio and video are recorded properly. You will be instructed on how to upload your weathercasts when you formally apply. Applicants are responsible for the technical quality of their submissions.

The remainder of this essay looks at the various evaluation categories for the AMS CBM review and explains what is sought in each. Certainly, it would be desirable if a checklist could be developed for scoring weathercasts that was so explicit that applicants could know even before submitting their weathercasts whether they had passed. Unfortunately, that is impossible because of the many differences that exist from applicant to applicant, such as the length of weathercasts, restrictions and requirements at stations, available graphics, and the variation in weather from area to area, season to season, and day to day that affects how the weather is presented. That is why the American Meteorological Society relies on the collective judgment of a group of reviewers, each with considerable experience in weathercasting. The American Meteorological Society's Board of Broadcast Meteorologists prizes individuality and creativity and firmly believes that there are many ways of doing good weathercasts.

Graphical Content

This category will be used to evaluate the visual presentation and clarity in creating the proper storyline to the local weather. Information for weathercasts should be chosen carefully, since information overload is as bad as too little information. The goal is a logical, interrelated progression leading from the recent past to the forecast. If time is a problem, rank order your graphics from most to least important, and spend less time on or completely omit the least important graphics. Sometimes you can use overlays to combine graphics, such as overlaying radar or surface map features on top of a satellite image. Good weathercasts present the current weather, what led to the current situation (often through a sequence of satellite and/or radar images), how the current weather compares with climatology, and the forecast, although not necessarily in that order. Any watches and warnings must be given appropriate emphasis.

Climatological information is important because it gives your audience (and the AMS CBM reviewers!) the context from which to interpret the weather. Please don't say that "climatology is what the weather should be at this time of year." Climatology is simply the average, and variation around the average is to be expected. If your station forbids you to mention climatology, perhaps you can show it without comment going into or coming out of a commercial.

You must provide climatology information for the days of the presentations and the prior 3 days and next 3 days in the online application system.

Tell your audience what each graphic is, and explain the meanings of all color codings. For example, do not make viewers guess whether you are showing a color enhanced satellite picture or a satellite-radar composite. Indicate the beginning and ending times (or give the length in hours) of all satellite, radar, and forecast "movies." Label maps with city names to provide reference points for your audience. Airport hub cities are good choices for a national map.

If your forecast for the high or low temperature is given as a range of temperatures, explain whether the range is due to forecast uncertainty or to variations in temperatures expected for the viewing area. If the latter, identify which areas will be warmer and which will be cooler, and explain why.

Explanation

Reviewers are asked to determine whether or not the candidate has given scientifically valid explanation of the processes that produce the recent, current, and anticipated weather conditions. It is especially in the explanation category that applicants need to show they have what it takes to earn the AMS CBM. Bluntly, this is the most common category for failure. A CBM applicant who simply points out features while beautiful animated graphics stream past will certainly fail, because even a non-meteorologist can look at a weather map and say things like, "Here is a low with a trailing cold front."

Successful CBM applicants help their audiences by sharing their knowledge of meteorology. They point out things like the flow around a high or a low bringing in cold air on one side and warm air on the other side; wind coming from over the ocean brings in moisture; cold air lies on the poleward side of the jet stream; etc. This information explains why current conditions are warmer or colder or wetter or drier than normal. Also make sure that you explain why the weather and forecast may be different for nearby areas (urban vs. rural, coastal vs. inland, lowland vs. highland, etc.).

Good explanations interrelate one graphic with another. For example, a national map and satellite image contain the incoming and developing weather relevant to the local forecast. By the time you actually reach the forecast, the audience should already have a good idea of what the forecast will be. During the forecast discussion, you can attribute the rain forecasted for, say, Tuesday followed by cold on Wednesday to the upcoming passage of the cold front you mentioned earlier.

As much as possible, explanations should use everyday language. Do not toss out technicalities to impress the AMS Board without consideration for the general public who is the real audience for your weathercasts.

It is a good idea to augment your basic format with a graphic chosen to highlight the key to the local weather for that day. Examples include a jet stream map, a water vapor image, a map of wind chill, accumulated rainfall or snowfall, etc. You might even prepare a special graphic to explain a sea breeze, a blocking high, or whatever is important that day. (Save it for future use, too!) A graphic designed to elucidate that day's weather adds variety and content to your basic format. It is also an excellent way to show the AMS reviewers that you know what you are talking about, i.e., that you are technically competent.

The applicant must also demonstrate knowledge consistent with the educational requirements for an AMS CBM. If there is little or no explanation, if an explanation of a fundamental atmospheric process is wrong, if graphics are incorrect, or if a forecast is unreasonable, the candidate will be marked down. For example, someone with a Ph.D. in meteorology will fail if he or she does not include appropriate explanations, while someone with the educational minimum will pass this section if he or she demonstrates mastery of that knowledge through well-chosen information, accurate graphics, clear explanations, and reasonable forecasts.

Presentation skills

This criterion is intended to measure the candidate's ability to communicate the weather story to their audience. A poor communicator has trouble helping the audience no matter how knowledgeable he or she may be. This is the least common category for failure. An applicant will fail this category only if he or she demonstrates a clear failure to communicate. Examples that could justify failure would include clearly deficient grammar or pronunciation, consistently blocking graphics with one's body, and too fast a pace with speech and/or graphics. An occasional verbal stumble is no cause for concern.

Suggestions for Radio

Radio presents its own special difficulties because radio weathercasts are almost always shorter than television weathercasts and one cannot use graphics. Nonetheless, the basic goals for good radio weathercasts are similar to those for television. The audience needs to be told what the weather is like now, what is coming, and why. Avoiding information overload is a particular challenge. A typical weathercast for an AMS CBM application is one minute long, but it is hard to call radio applications "typical" because there are so few compared to the number of TV applications.