NEWSLETTER

National Weather Association

No. 09 – 7 July 2009

Becoming a Weather Idol
Thoughts on Broadcaster Professionalism

You've made it to the finals of the American Weather Geek contest, and the applause is fading after your latest weathercast on the big stage. Knees trembling, your clicker nearly slipping out of sweaty palms, you face the judges for their comments and verdict.

"Just another day trying to figure out stupid Northwest flow storms."

Handy speaks first, gushing over how you easily handled that incredibly awkward toss from the anchor who ambushed you wanting to know how you can get snow when the temperature is above freezing. Noting that it is May and 84F outside, Handy applauds you for being able to think on your feet and roll with the punches. In fact,

See IDOL, page 4

Graphics are to the weathercast what the melody is to the lyrics of a good song: perfectly married, helping to support and reinforce (Copyright 2009 KSNW TV).

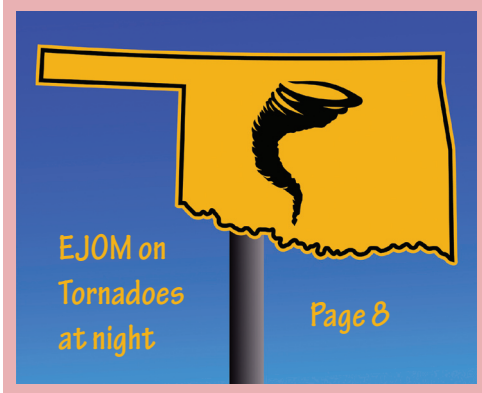
Preparing and Delivering an Oral Presentation - Part I

Communicating knowledge in an effective and timely manner is the most important attribute that a professional can provide to a target audience. Conveying that information orally affords the presenter with an opportunity to raise public awareness of a key issue, to educate, to instill enthusiasm as well as support for a cause or simply to convey a single idea. It is the most powerful medium of communication.

The following example may appear comical at the onset; however, it is based on an actual event and illustrates the salient points well. A nationally recognized expert on climate was invited to speak during a weekly departmental seminar. His talk was advertised with great fanfare and anticipation. Graduate students arrived in great numbers secure in the knowledge that each would witness a renowned scientist's review of his published work on a topic of great interest. It would provide a rare opportunity to peer under the hood and find out what drives a gifted expert's intellect. To everyone's dismay, the next 45 minutes more closely resembled the chaotic discourse of a novice rather than the intellectual exposition expected of a seasoned veteran. This distinguished scientist could not have found a coherent sentence if it were given to him on note cards or written on his palm. He held a stack of transparencies precariously in one hand, while waving at the audience with

See PREPARE, page 7

Inside This Edition



New Training and Education Offerings from the COMET Program

In the last quarter, COMET has published nine new modules, including topics such as Climate Change, Ocean Modeling, Satellite Meteorology, Quantitative Precipitation Estimation and Fire Weather. We even have a presence on Facebook with our new COMET/MetEd Group online at www.facebook.com/group.php?gid=111485157256&ref=nf. Following is a complete list of new online modules that may be of interest to you!

Featured Publication of the Quarter:

Climate Change: Fitting the Pieces Together
www.meted.ucar.edu/broadcastmet/climate/

Other New Publications:

Precipitation Estimates, Part 1: Measurement
www.meted.ucar.edu/hydro/precip_est/part1_measurement/

Two ocean model related modules:

Nearshore Wave Modeling
www.meted.ucar.edu/oceans/nearshore_wave_models/

Mesoscale Ocean Circulation Models
www.meted.ucar.edu/oceans/ocean_circ_models/

Two modules in the Satellite Feature Identification Series:

Ring of Fire
www.meted.ucar.edu/norlat/sat_features/ringoffire/

Blocking Patterns
www.meted.ucar.edu/norlat/sat_features/blocking patterns/

Intermediate Wildland Fire Behavior Distance Learning Course:

S-290 Unit 9: Observing the Weather
www.meted.ucar.edu/fire/s290/unit9/

S-290 Unit 1: The Fire Environment
www.meted.ucar.edu/fire/s290/unit1/

S-290 Unit 2: Topographic Influences on Wildland Fire Behavior
www.meted.ucar.edu/fire/s290/unit2/

COMET has also published numerous Spanish language modules, including recordings from the Regional Training Course on the use of Environmental Satellite Data in Meteorological Applications (online at www.meted.ucar.edu/satmet/wmo_sept_2008/index_en.htm), which was held in Argentina.

As always, COMET's materials are freely available to everyone, courtesy of our sponsors (NOAA's NWS, NESDIS GOES and NPOESS programs, Naval Meteorology and Oceanography Command, the Air Force Weather Agency and the Meteorological Service of Canada), as well as special funding from Australia's Bureau of Meteorology, EUMETSAT, the National Science Foundation and the NOAA NWS International Affairs office.

You'll need to register in order to access the modules - it is free and available in both English and Spanish. We welcome any comments, suggestions or feedback through the MetEd Web site or contact Greg Byrd at byrd@comet.ucar.edu.

Greg Byrd
Professional Development Committee

Hey Students! Need Career tips or a mentor?

Then we have a session for you!

A special session for students will be held in conjunction with the NWA 34th Annual Meeting in Norfolk, Va. The 2nd Student Session, to be held on the afternoon and evening of Sun., Oct. 18, will include topics such as a career wake up call, job interviews and resumes, finding a mentor and panel discussions with professionals from a number of atmospheric science fields.

Last year's inaugural Student Session in Louisville was extremely well received with over 100 students attending. Here are some of their thoughts:

"The student session was great!"

"Well organized with great talks!"

"Student session was a great idea!"

"Great presentations and opportunities to interact with peers!"

"My expectations of the meeting were exceeded due to the student sessions!"

"Exciting and great student involvement!"

"Great interacting with other students!"

"Networking and meeting other students best feature of the meeting!"

Tips galore will be shared this year regarding how to separate yourself from your peers when entering the extremely competitive job market.

See www.nwas.org/meetings/nwa2009/ and page 5 for more on this exciting meeting.

There will be **no** scholarship *golf* outing this year...

Instead, we'll be

Bowling for Scholarships

Tuesday, October 20th

During the 34th NWA Annual Meeting

$40 per person

(Includes transportation, dinner, games, shoes, and donation)

Who will be the King Pin of the NWA?

Space is limited!

Sign up early on your NWA Annual Meeting registration form.

Teams will be put together in Norfolk.

From Thunderstorms to Climate Change, New AMS Book Explains It All

Editor's note: We are providing this information regarding the American Meteorological Society's (AMS's) new book by Jack Williams since it should appeal to many NWA members.

Weather is still central to the lives of all Americans. Indeed, it's hard to imagine a topic of greater collective interest. America has one of the most varied and dynamic weather systems in the world. Every year, the Gulf coast is battered by hurricanes, the Great Plains are ravaged by tornados, the Midwest is pummeled by blizzards and the temperature in the Southwest reaches a sweltering 120 degrees Fahrenheit. Whether we want to know if we should close the storm shutters or just carry an umbrella to work, we turn to forecasts. But few of us really understand the science behind them.

All that changes with *The AMS Weather Book: The Ultimate Guide to America's Weather* by Jack Williams. This comprehensive and up-to-date guide to our weather and our atmosphere is the ultimate resource for anyone who wants to understand how hurricanes form, why tornados twirl, or even why the sky is cerulean blue. Covering everything from daily weather patterns to air pollution and global warming, *The AMS Weather Book: The Ultimate Guide to America's Weather* will help readers make sense of news about the weather, cope with threats and learn how integral oceanic and atmospheric science are to navigating our place in the physical world.

In the book, Williams, a science journalist and former *USA Today* weather editor, explores not only the science behind the weather but also the stories of people coping with severe weather and those who devote their lives to understanding the atmosphere, oceans, and climate. The book's profiles and historic discussions illustrate how meteorology and the related sciences are interwoven throughout our lives. Words alone, of course, are not adequate to explain many meteorological concepts. To illustrate complex phenomena, *The AMS Weather Book: The Ultimate Guide to America's Weather* is filled with engaging full-color graphics that explain such concepts as why winds blow in a particular direction, how Doppler weather radar works, what happens inside hurricanes, how clouds create wind and snow, and what's really affecting Earth's climate.

For Weather Channel junkies, amateur meteorologists and storm chasers alike, this publication is an invaluable tool to help better understand how weather works and how it affects our lives.

The book is available directly from the AMS for $25 for AMS members and $35 for non-members (includes shipping). To order, call (617) 227-2426 ext. 686, email amsorder@ametsoc.org or send your pre-paid order to the American Meteorological Society at AMS Order Dept., 45 Beacon Street, Boston, MA 02108-3693. The book is also available through major book sellers across the country.

President's Message: A Status Update

I would like to use this edition of the President's Message to cover a few topics. In mid-May I had the opportunity to spend a week in Norman, Okla., participating in the Experimental Warning Program (EWP) as part of the NOAA Hazardous Weather Testbed (HWT). When I was a forecaster at the Storm Prediction Center I earned the nickname "the dry slot" because of my tendency to suppress convection, and it proved true again this year as Oklahoma experienced a week of beautiful cloud free weather (much to my dismay!). Fortunately, in the EWP you can focus on any part of the country, and there was one good severe weather day in Nebraska where we could issue test warnings. Also, we went through a number of case studies from earlier in the year that were truly fascinating. The purpose of the EWP is to learn how emerging technologies can improve the warning process. I can only describe what was available to the visiting scientists and forecasters as being like a kid in a candy store. There was access to Phased Array radar data with 60 second update times, the highly sensitive Center for Collaborative Adaptive Sensing of the Atmosphere (CASA) radars, the Oklahoma Lightning Mapping Array and The Warning Decision Support System — Integrated Information (WDSS-II) algorithms and display interface. The job of the participants was to determine how these tools improved the convective warning process, and let me assure you that they did! We will be having a series of invited talks about this technology at the NWA Annual Meeting in Norfolk so that these exciting datasets can be shared with everyone.

This leads nicely into my next topic which is the planning of the NWA Annual Meeting. We had another amazing response this year with approximately 230 abstracts submitted. There will be obvious challenges trying to fit all of the abstracts into a four-day agenda, but the planning team is focused and committed to providing the best possible program for the attendees. Don't forget that there will also be a broadcast and special student session as well as a teacher's summit, so plan on spending the whole week if you can. The Program Committee met in Norfolk in late June to begin the process of piecing together the agenda, which will be published in the August Newsletter.

Finally, I would like to report that the NWA Council had a very successful business meeting in June in Omaha (again no storms!). We devoted an entire day to strategic planning with the help of a facilitator. Great progress was made on building consensus for a strong future of the organization. As the immediate Past President and head of strategic planning, John Scala will use the President's Message space in September to provide a more detailed briefing on the meeting and where we are headed as an organization. There have been many challenges facing the NWA this year but also many opportunities. I firmly believe that we are on the verge of taking a great leap forward in services provided to our members.

Mike Vescio
President

We know our plans ... where will you be?

The 2010 Annual Meeting will be in Tucson, Arizona
The 2011 will be in Birmingham, Alabama.

IDOL from front

CHANGE is the name of the game in our industry. Gone are the days when you could walk in mid-afternoon and have just two or maybe three weathercasts to do in the entire day. The broadcast meteorologist of this era has to be ready to deliver products in all sorts of venues. From the traditional weathercast, to streaming on the Internet, to mobile video, to social networking, the broadcast industry is changing at a blinding speed. Responding positively to change is a critical skill for the modern broadcast meteorologist. In our KSN WeatherLab, we now provide microcasts for five full power TV stations; live and recorded content for a cable channel; recorded content for two radio stations; video, graphics and text content for our own Web site; streaming radar and storm coverage on our Web site; social networking updates, and, oh yeah, we still have to make up a forecast. In fact, we make five complete 7-day forecasts every day! If you haven't read "Who Moved My Cheese," get it and read it.

Suddenly, while day dreaming of mice and tennis shoes (you'll get that after you read the book), you realize that Flara is ready to share her comments. She notes how your weathercast was like a finely crafted song—with lyrics and music supporting each other. Your graphics were interesting, entertaining and informative without being distracting. You have clearly mastered the tools at your disposal. There are precious few stations across the country that can afford weather producer positions anymore—so it is a good thing you have learned how to operate each of your systems and use them to get the best possible visual support for your weathercast. In fact, Flara compliments you on how your storytelling fits your graphics like the lyrics of a good song are perfectly wedded to the melody. Your story was well thought out, explaining how the weather is changing, leading perfectly into the big payoff - what folks are waiting for - the extended forecast. Flara finishes by noting that your extended forecast was great - all of the icons were very easy to see and understand, and the temperatures were even laid out so that no one had to guess which low was for what night...or is that morning?

A good graphic makes the viewer feel smart. It should be easy and quick to read and understand (Copyright 2009 KSNW TV).

While you are pondering that last very deep point, Smalla leaps to her feet gyrating wildly in celebration of your severe weather coverage. She completely falls to pieces over how you did **not** fall to pieces! You kept your head in those critical moments, remembering that if you panicked, your viewers sure would as well. Your real time analysis of the storms was rock solid, given the information that you had at that precise moment. You knew the storm environment, and what to expect. You took advantage of your resources and used them all to provide warnings that were clear and effective. And, Smalla is nearly moved to tears by the fact that you remembered the most important thing: root for the humans and not the tornado. Remember there are scared families looking to you for both warning and reassurance.

Oh my. You can tell by the look on his face that Lyman is not a happy camper. The sneer is building as he leans in, eyes narrowing. This can't be good.

"I really didn't know what to expect when you started," he purrs. "I mean, really, I half expected to see a pocket protector beneath that polyester blazer." By this time your blood pressure is only exceeded by your heart rate. "And your hair. Does it ever really move? It looks like it is painted on. I mean, what am I to think here?"

Your knees are locked to prevent a total collapse, and you are seriously regretting not snarfing the entire half bottle of Tums. Lyman rears up like a cobra ready to snap forward with that last, fatal dose of venom. Your life — well, really you don't have one because you are a weather Geek (proud of it, mind you) — is passing before your eyes.

He pauses, as if savoring the moment. "You just blew me away," he exclaims! Lyman then proceeds to comment on how your on air performance skills were outstanding. You were relaxed — but you showed your obvious enjoyment and enthusiasm for weather. You had energy so that your presence filled the TV and came right out into the living room. There was range — gravitas for severe weather, but no fear of smiling and showing a sense of humor and humanity at other points. The basic physical skills were there, of course — enunciation with a pleasant voice, eye contact, clean and effective interaction with the key wall, disciplined use of the third dimension with the camera. But more than that, Lyman concludes, "You simply owned it. I mean you just started talking about radar and the next thing I knew I was just totally drawn in."

"I think you have four Yes's"

"DAVE ARE YOU THERE," in my IFB so loud it hurts.

"Y-y-yes, I'm here. Mic check, mic check, 1-2-3-4."

"OK. I have just been trying to call you and you weren't answering. Two minutes to news."

Wow. No Handy, no Flara, no Smalla, no American Weather Geek. Just another day trying to figure out stupid Northwest flow storms. But at least Lyman liked me.

This is the first in a series of newsletter articles where we will discuss professional development topics and tips for broadcasters. Stay tuned!

Dave Freeman, Chief Meteorologist
KSNW TV, Wichita, Kan.
Professional Development Committee

Kenneth Carey
Chair, Professional Development Committee

34th NWA Annual Meeting: Pre-register Now!

The National Weather Association's 34th Annual Meeting will be held at the *Sheraton Waterside Hotel*, on the waterfront in downtown Norfolk, Va., Oct. 18 - 22, 2009. Visit www.nwas.org/meetings/nwa2009 for more.

Annual Meeting Hotel Information

The Sheraton Norfolk Waterside Hotel: www.sheraton.com/norfolk
NWA room rates (make sure to request the NWA group rate when booking!):
Deluxe guest rooms: $94 per night (single)
$139 per night (double)
Reserve a room by phone by calling (888)627-8042.

The Future is Now: New Technologies and Techniques to Support the Weather Enterprise and Society: 2010 and Beyond

Why Pre-register? The pre-registration fee includes a pre-print volume with program and abstracts. For the period of days registered, it also includes admission to all oral presentations, poster sessions and exhibit sessions plus coffee/refreshment breaks. Full registration includes the Wednesday Awards Luncheon.

Pre-registration Fees *(through Oct. 9):*

Sun., Oct. 18: Broadcast Workshop and DVD Swap (8 a.m.–11 p.m.)
- $100 NWA members and presenters
- $50 member students and retired members
- $140 for non-members
- $95 for non-member students and retired

Sun., Oct. 18: Student Seminar and Resume/DVD critique night session (1 p.m.–11 p.m.)
- $35 NWA student members and presenters
- $50 for non-member students

General Sessions/Activities Mon.–Thurs.; Oct. 19 - 22
- $240 NWA members and presenters
- $125 member students and retired members
- $280 for non-members
- $175 for non-member students and retired

Special One-Day Rates for period Oct. 19–22
- $95 NWA members and presenters
- $50 students and retired members
- $120 for non-members
- $90 for non-member students and retired

Special All events, Sun.–Thurs.
- $330 NWA members
- $410 for non-members

Special Student and Retired, All events, Sun.–Thurs.
- $145 NWA members
- $215 for non-members

Pre-Register On-Line by credit card (MC or Visa):

- Attending Broadcast Workshop and/or most of the General Session register at: www.nwa-registration.org/register.shtml
- Attending Broadcast Workshop and/or only a day or two of the General Session register at: www.nwa-registration.org/registerbyday.shtml

Pre-Register by Mail:
Mail this form with full payment of fees by Oct. 9, 2009 to: NWA Meeting, 228 West Millbrook Road, Raleigh NC 27609-4304 USA. Make payment to "NWA" in U.S. funds by a U.S. bank check, money order or government/ institution purchase order.

Name (for nametag): _____

Employer, School or other Affiliation (for nametag): _____

City/State (for nametag): _____

Telephone number: _____

E-mail address: _____

Arrival Date at meeting: _____

Departure Date from meeting: _____

Preregistration fees: $ _____

Number of extra Luncheon tickets ($30 each): $ _____

First annual "Bowling for Scholarships", Tues., Oct. 20 ($40): $ _____

Total Funds enclosed: $ _____

Please Circle ALL following phrases that apply to you:

NWA member | NWA local chapter member | Non-member | Student
Retired | Session Chair | Presenter
Program committee member | Local Arrangements committee member
Bringing a DVD to the DVD Swap | Attending DVD Swap without a DVD
Student with broadcast DVD for critique at Sunday Resume/DVD session

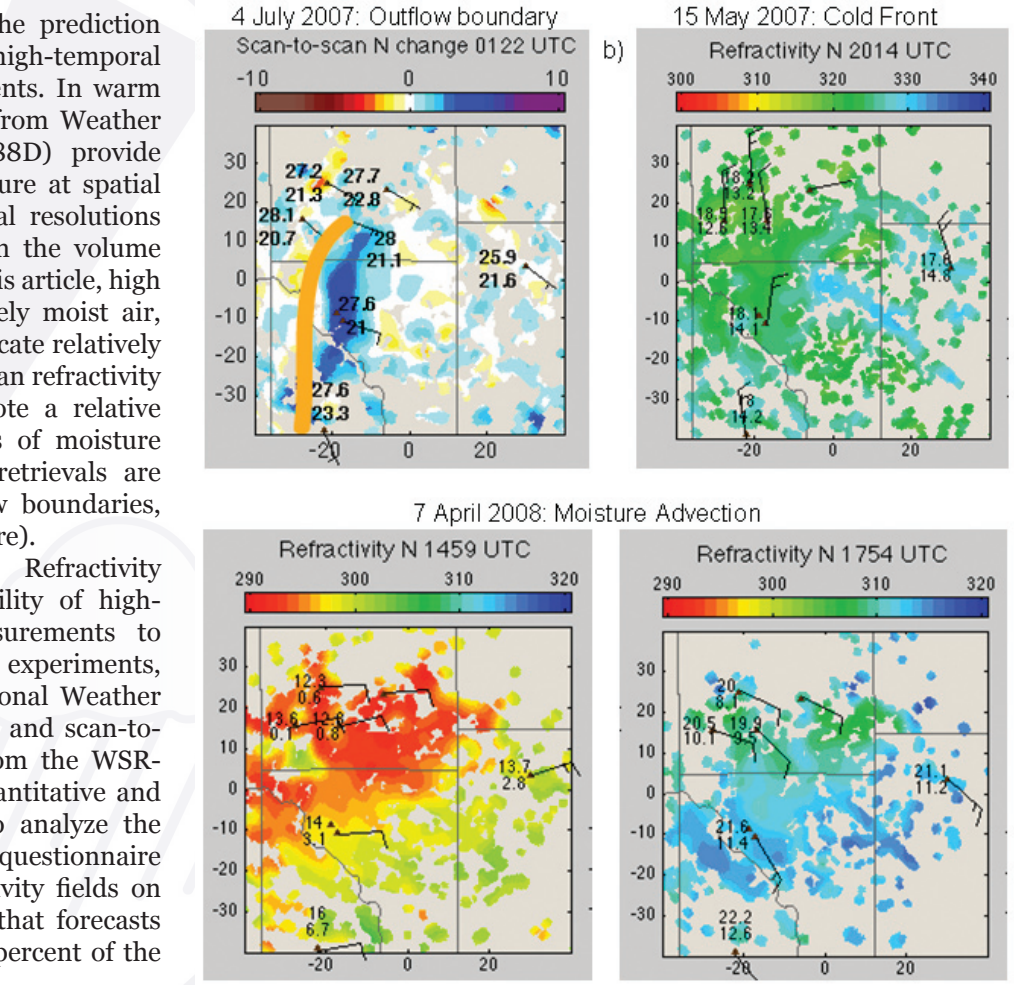
If a non-member joins, they will immediately be eligible for the member rates

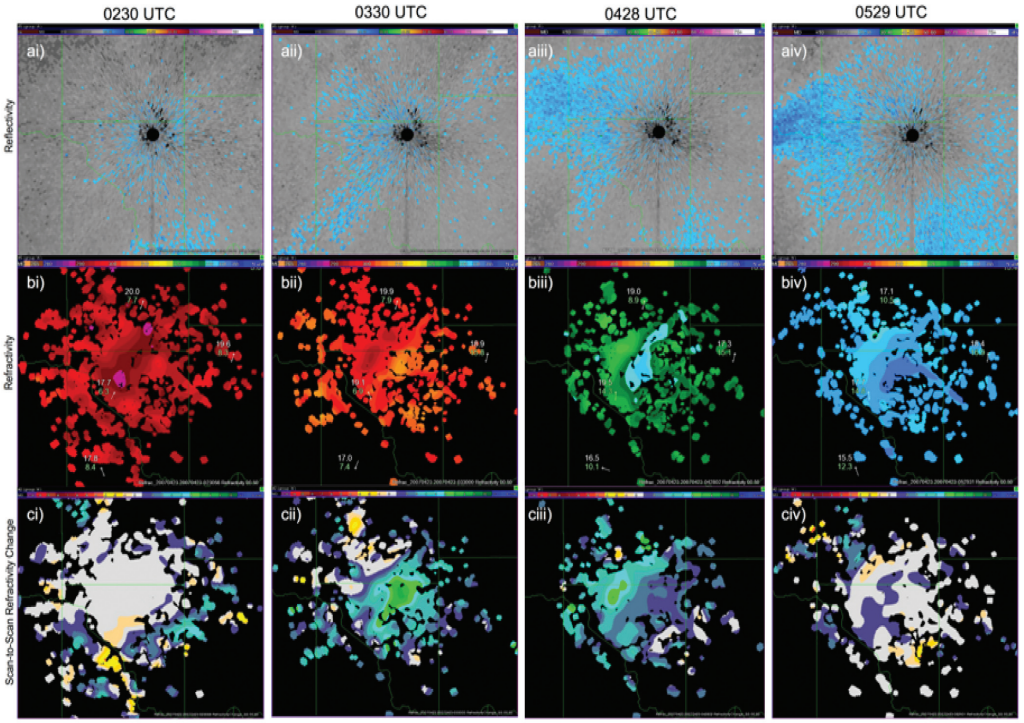
Operational Benefits and Limitations of Radar Refractivity

A challenge to forecast operations is the prediction of convection initiation in the absence of high-temporal and spatial resolution moisture measurements. In warm conditions, refractivity retrievals obtained from Weather Surveillance Radar-1988 Doppler (WSR-88D) provide proxy measurements of near-surface moisture at spatial resolutions as small as 2 km and temporal resolutions ranging from 4.2 to 10 min, depending on the volume coverage pattern (VCP). In cases shown in this article, high absolute refractivity values indicate relatively moist air, whereas low absolute refractivity values indicate relatively dry air. Another field of interest is scan-to-scan refractivity change, as positive (negative) values denote a relative increase (decrease) in moisture. Examples of moisture variability depicted by radar refractivity retrievals are moisture gradients associated with outflow boundaries, cold fronts, and moisture advection (top figure).

The Spring 2007 and 2008 KTLX Refractivity Experiments investigated the potential utility of high-resolution, near-surface refractivity measurements to operational forecasting. During these experiments, forecasters at the Norman, Oklahoma National Weather Service Forecast Office assessed refractivity and scan-to-scan refractivity change fields retrieved from the WSR-88D near Oklahoma City (KTLX). Both quantitative and qualitative analysis methods were used to analyze the 41 responses from seven forecasters to a questionnaire designed to measure the impact of refractivity fields on forecast operations. The analysis revealed that forecasts benefited from the refractivity fields on 25 percent of the days included in the evaluation. In each of these cases, the refractivity fields provided complementary information that somewhat enhanced the forecasters' capability to analyze the near-surface environment and boosted their confidence in moisture trends. A case in point was the ability to track a retreating dryline after its location was obscured by a weak reflectivity bloom caused by biological scatterers (bottom figure). Forecasters unanimously agreed, however, that the impact of this complementary information on their forecasts was too insignificant to justify its addition as an operational data set. A way forward for increasing the utility of refractivity retrievals to forecasters is exploring the impact of moisture variability on convection initiation at spatial scales smaller than those resolved by current surface observation networks.

Pamela Heinselman
NSSL





Top: Examples of the types of moisture variability depicted by radar refractivity fields: a) westward moving outflow boundary (orange line indicates the position of the reflectivity fine line), b) moisture gradient behind a cold front, and c) moisture advection.
Bottom: Time sequence of a) reflectivity, b) refractivity, and c) scan-to-scan refractivity change depicting the northwestward retreat of the dryline during the evening on 22 April 2007 (23 April UTC).

PREPARE from front

the other. He appeared to be swatting flies rather than leading the audience toward his intended objective. The focus of his talk was lost amid the multitude of gyrations and sadly, an obvious lack of preparation.

A successful oral presentation relies on a verbal "trifecta" of diction, annunciation and inflection combined artfully with an appropriate use of peripherals to capture and retain the attention of an audience. Few of these skills are natural; most are learned and perfected over time. A skilled orator will also utilize appropriate body language, eye contact, and knowledge of the speaking environment to convey key points of an address while avoiding the common pitfalls that condemn many a qualified speaker.

Tom Skilling, Chief Meteorologist at WGN-TV in Chicago, provided the lead keynote address at the 33rd annual meeting held in Louisville last October. Tom held the audience in the palm of his hand with his superlative selection of words and colorful commentary delivered in his easily recognizable warm and appealing voice. He interjected his own experiences of historical weather in Chicago using a delightful mix of humor and fact with video clips that recorded some of Chicago's worst weather.

Unlike the written word, an oral presentation is often accompanied by subtleties in expression that when used effectively can elevate the delivery and assure the attention of an audience. It is equally important to recognize that a disregard for word selection and articulation, appearance, posture and even attitude will trump superior material.

Speak deliberately and with conviction. Avoid colloquialisms and exaggerations. Do not draw attention to a mispronounced word. Mistakes happen; how we deal with those mistakes determines how our audience reacts. A lengthy talk, poorly developed slides, and a lack of eye contact will doom even the most gifted orator. Remember, a demonstrated comfort with the environment, and the material presented in concert with a command of the language is an extremely powerful advantage in any forum.

In a subsequent newsletter, we will address the questions every speaker needs to ask when planning to give a talk or present a paper, and help you develop answers for your particular situation. In a third article, we will discuss effective presentation techniques, including PowerPoint slides and poster development considerations. Until then, consider joining a local Toastmasters club to develop fundamental speaking skills in a friendly, supportive environment.

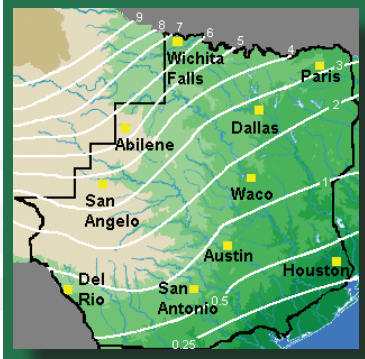
John R. Scala
Immediate Past President; Chair, Strategic Planning Committee

Carl D. Thormeyer
Broadcasters Conference Program Committee

Kenneth F. Carey
Chair, Professional Development Committee

Just in Time for Summer Reading!

Look for it this August: The National Weather Digest (Volume 33, Number 1)



Texas Mean Seasonal Snowfall with study area outlined in black. Solid white lines are snowfall contours in inches. From the paper by Ted Ryan and Stacie Hanes.

The next edition will be full useful topics — even papers in all complete with color graphics like this!

We'll bring you two hurricane papers, one on storm surge forecasting and another addresses gust factors for land-falling hurricanes. Three articles address various aspects of tornadoes including a Georgia case study, low level thermodynamic characteristics and residents' preparedness based on previous experiences. There are also two papers from Texas looking at winter storms and a desert flood event.

Professional Development Opportunities in 2009

13th Annual High Plains Conference: Aug. 27-28
The High Plains Chapter of the NWA will again sponsor this popular conference. It will be at the Mid-Plains Community College - North Campus, North Platte, Neb., in North Platte, Neb. A preliminary program, conference registration, hotel information and other details will be available soon. Visit www.highplains-amsnwa.org for more.

5th Symposium on Southwest Hydrology: Sept. 30 - Oct. 1
Co-sponsored by COMET, the National Weather Service, the University of New Mexico Department of Earth and Planetary Sciences, the Electronic Journal of Severe Storm Meteorology and Vaisala, Inc., the symposium will be held at the Albuquerque Marriott Hotel-Uptown. Register and submit abstracts at: www.weather.gov/abq/swhydromet/. Abstracts should be submitted electronically via this symposium Web site no later than Fri., July 31.

34th NWA Annual Meeting: Oct. 17 - 22
Reserve your room now at the Sheraton Waterside Hotel in Norfolk, Va. Details on page 5 and at on the NWA Web site at: www.nwas.org/meetings/nwa2009.

6th GOES Users' Conference: Nov. 3 - 5
"Bringing Environmental Benefits to a Society of Users" will be held at the Monona Terrace Convention Center in Madison, Wisc. Organized by NOAA with support from CIMSS at the University of Wisconsin-Madison. For more information visit: http://cimss.ssec.wisc.edu/goes_r/meetings/guc2009. The conference co-chairs are Dick Reynolds (410-268-5360; Dick.Reynolds@noaa.gov) and James Gurka, NOAA/NESDIS (james.gurka@noaa.gov).

During the first week of July, two new NWA Electronic Journal of Operational Meteorology (EJOM) Articles were posted to the NWA E-Journal Web Site. The articles are titled: **(1)** "*Environmental Characteristics Associated with Nighttime Tornadoes*" by Jonathan M. Davies (Private Meteorologist) and Anthony Fischer (National Weather Service Aviation Weather Center) and **(2)** "*Significant Nighttime Tornadoes in the Plains Associated with Relatively Stable Low-Level Conditions*" by Anthony Fischer and Jonathan M. Davies. As companion papers, both research the topic of nighttime tornadoes. Although nighttime tornadoes pose a disproportionate risk, there is a lack of studies focusing on ingredients and characteristics specifically associated with tornado environments after dark.

The former study examines a large database of Rapid Update Cycle (RUC) analysis soundings associated with tornadic and nontornadic supercell storms, comparing nighttime and daytime environmental parameters. The latter study examines the specific near storm environments associated with nighttime tornadic supercells in Kansas on 29 May and 11 June of 2008 in settings with very strong vertical shear but also large CIN. Both articles include a discussion of operational issues and applications.

See **2009-EJ3** and **2009-EJ4** online at: www.nwas.org/ej/2009/2009.php).

Dates 2 Remember

June - November: 2009 Hurricane Season

Aug. 27-28: 13th Annual High Plains Conference. North Platte, Neb.

Sept. 30-Oct 1: 5th Symposium on Southwest Hydrology. Albuquerque, N.M.

Oct. 17-22: 34th NWA Annual Meeting. Norfolk, Va.

Nov. 3-5: 6th GOES Users' Conference. Madison, Wisc.

See page 7 or www.nwas.org/events.php for details on these and additional Professional Development Opportunities!

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Submit newsletter items directly to the NWA office or to nwanewsletter@nwas.org. Material received by the 25th will be considered for the next month's issue.

Members receive the Newsletter and *National Weather Digest* as part of their regular, student or corporate membership privileges. Newsletter subscriptions are available for $18 per year plus extra shipping costs outside U.S. Single copies are $1.50. **Please send address, phone number, email and affiliation changes to assist@nwas.org.**

Supporting and promoting excellence in operational meteorology and related activities since 1975.

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