

Board for Operational Government Meteorologists

Jobs Application Webinar Companion Document

Introduction

As someone interested in starting a career in government operational meteorology, the application process and the competition that goes with each position can seem like an insurmountable task. Having gone through the process, we realize that knowledge is power when it comes to learning what it takes to navigate the hiring process.

The Board for Operational Government Meteorologists is offering this webinar, along with the companion document that you are reading, to provide you with experiences from those who have been successful in gaining their respective roles while providing items that they wished they had known in order to help give you a better chance of success. Please take a moment to read over these experiences and feel free to reach out to the individuals who have offered their stories.

Building a network and finding mentors along your journey can help you to build exposure to those working within an agency which you may soon wish to become a part of. As you do this, feel free to ask for tips on your resume, about interview techniques, and what they potentially did (or did not do) to gain the attention of hiring officials leading into the overall process.

We hope that what is provided is useful, and wish you the best in achieving your goal of starting your career as an operational government meteorologist.



Ryan Ellis, Chair



Dr. Stephen Bieda, Chair-elect

Meet the Panel

Jordan joined NASA as civil servant in the Earth Science Branch at Marshall Space Flight Center (MSFC) in Huntsville, Alabama in November 2019. Prior to that he worked for the Earth System Science Center at the University of Alabama in Huntsville supporting the Earth Science Branch at MSFC. He currently supports multiple programs including the NASA Disasters Program and the Short-term Prediction Research and Transition (SPoRT) Center. Jordan specializes in leveraging remote sensing to respond to natural disasters including, tropical cyclones, flooding, and severe weather and engaging with end-users and stakeholders. He also serves on the AMS Board of Early Career Professionals after previously serving on the Local Chapter Affairs Committee.





A meteorologist by trade, Dr. Erickson has spent over fifteen years bridging the gap between Meteorology, Communications and Emergency Management. During her tenure in emergency management, she has provided interpretations of meteorological, hydrological and climatological analysis, and provided decision support for Senior Leadership and partners. For the past six years, Dr. Erickson implemented and serves as the inaugural FEMA Liaison to the Storm Prediction Center (SPC) located in Norman, Oklahoma.

Dr. Erickson attended the University of Miami, Florida, earning a Bachelor of Science (BS) degree in Atmospheric Science and Mathematics with emphasis on tropical weather. Continuing her education, Dr. Erickson received her Master of Science (MS) degree in Meteorology from the University of Oklahoma (OU) with emphasis on severe weather and societal impacts. She also obtained a Doctor of Philosophy (PhD) degree from OU in Meteorology and Communications focusing on the communication of weather information to FEMA, emergency management, and partners for enhanced situational awareness and decision support.

Angela Mose recently graduated from Valparaiso University with a B.S. in Meteorology. She plans to continue her education and pursue a M.S. in Meteorology at the University of Oklahoma come August. During her time at Valpo, she earned a place in three honor societies, became a Hollings Scholar, Radiosonde Intern, and was the Porter County Schools Forecasting Intern her final year. She spent the summer of 2019 in Rapid City, SD, researching at the NWS Office as a Hollings Intern. Her research focused on gust front propagation and its relationship to peak wind gusts within thunderstorms. While she was born and raised in Indiana, Angela has never been one to stay in the same place. She loves to travel and has visited 31 states so far, but she hopes to eventually visit all 50 states. In her free time, she likes to read, write, play with her dog, and attempt to socialize with her cats. Her favorite meteorological activity is launching weather balloons, and she has helped launch them with wind chills around -40, approaching -50.



Meet the Panel (continued)

Bob DuFrane

Supervisory Program/Management Analyst, Office of the CFO, NWS, Silver Spring, MD

Robert (Bob) DuFrane is a Supervisory Program/Management Analyst for the Office of the Chief Financial Officer (CFO), National Weather Service (NWS) Headquarters in Silver Spring MD. In this position since 2015, Bob oversees strategic workforce and succession

planning for the NWS and its population of over 4,300 employees. He uses data analytics to drive hiring requirements, factoring in projected retirements and departures to replenish the NWS workforce. Bob's biggest accomplishment in this position was to develop a streamlined hiring approach using a single point of entry, getting buy-in from across NWS to this revamped process. The end result: this approach has reduced NWS's time-to-hire by over 50%, making it the lowest across all of NOAA, and a model for other NOAA line offices to follow.

Prior to coming to the NWS's CFO staff, over the previous 14 years (2001-2015), Bob held positions as Resource Manager for the former Office of Science & Technology at NWS Headquarters, where he oversaw execution of an annual budget of \$130M; Management Analyst in the Office of Human Capital at U.S. Immigration & Customs Enforcement (ICE), where he was the business manager responsible for a \$30M annual budget and executing position management for over 200 employees at three different locations across the country; and a Management Analyst writing aviation-related policy in the Aviation Services Branch, the former Office of Climate, Water, and Weather Service (now Office of Analyze, Forecast, and Support for Operations) at NWS Headquarters.

Prior to joining NWS in early 2001, Bob served 24 years in the United States Air Force (AF), retiring on February 28, 2001. Bob's entire career in the AF was in the Weather Career field. He had tours across the globe as a Weather Observer, Weather Forecaster, and Weather Superintendent (equivalent to an MIC). In Bob's last position before retiring, he managed a staff of over 70 military personnel providing combat weather operations support to the U.S. Army's 3rd Mobile Armored Corps at Fort Hood, Texas.

Bob has an Associate's Degree in Atmospheric Science from the Community College of the Air Force, Bachelors of Science in Management from Park College, and Masters of Science in Organizational Design from the University of Central Texas (now known as Tarleton State/Texas A&M).

Bob has been happily married to his wife Yong for 40 years. They have two daughters, each with their own successful careers. Bob enjoys golfing, sport shooting, and boating in his off time.



Director, Management and Organization Division, NWS

Lisa Love joined the National Weather Service (NWS) in May 2016 and works in the Office of the Chief Financial Officer/Chief Administrative Officer. She serves as the Director, Management and Organization Division. As such she leads and manages Chief Administrative Officer functions, including all national level administrative policy, covering approximately 4300 employees at headquarters and field locations. She also manages all NWS workforce management policy and activities, such as organizational design and position management activities; enterprise workforce planning; and organizational development support.

More specifically, Lisa led the effort to develop and implement the GS-5/12 Meteorologist Career Progression Program, the largest and most significant change to the NWS since the Modernization and Associated Restructuring in 2000. This program is a non-competitive, competency based career path for all current and future operational

Meet the Panel (continued)

Lisa Love

(continued)

meteorologists at 122 Weather Forecast Offices, impacting approximately 1000 employees. In addition, she led the effort to draft and design the Workforce for the Future: NWS Strategic Human Capital Plan, ensuring alignment with the NWS and DOC Strategic Plans and incorporating

recommendations from four organizational studies. Lisa's career spans 34 years, most of which is in federal human capital management and program development, including management of a comprehensive human resources management program at various Federal agencies and operational experience in recruitment and staffing, position management and classification, pay and leave administration, employee and labor relations, and policy development.

Lisa earned her MS degree at the University of Maryland and a BBA at Howard University.



Adam is a meteorologist at the National Weather Service office in San Diego, where he has been forecasting the weather across Southern California for two years. He is involved in the diversity and social media programs, as well as giving weather talks to various groups at the office or in community schools. Adam graduated from Ohio University with degrees in Meteorology and French and is currently working on his Masters in Emergency Management, which he will complete at the end of this year. Prior to his position at the NWS, Adam completed internships with NWS Bismarck, North Dakota and the state's Atmospheric Resource Board, along with internship experiences at NWS Charleston, West Virginia and Lancaster County Emergency Management Agency in Pennsylvania.

See Adam's and Katie's tips for aspiring government meteorologists on pages 17 and 6, respectively!

Katie Webster has worked as a meteorologist with NC Emergency Management since July 2013. As the Natural Hazards Branch Manager, Katie works to organize and implement planning efforts for all natural hazards that pose a threat to North Carolina. During times of disaster, she works at the State Emergency Operations Center (SEOC) providing continuous meteorological and planning support to the State Emergency Response Team (SERT).



Meet the Moderator



stephen.bieda@noaa.gov

Bio

Dr. Stephen Bieda is the Science & Operations Officer at National Weather Service (NWS) Amarillo, TX and serving a temporary role as the Acting Executive Officer to the NWS Chief Learning Officer. Dr. Bieda is a graduate of the University of Arizona, with a B.S. (2003) and M.S. (2007) in Atmospheric Sciences, as well as a Ph.D. (2012) in Arid Land Resource Sciences (emphasis meteorology/climatology). Stephen's federal career started with the United States Air Force (USAF) in June 2009 as the Science & Operations Officer for the 25th Operational Weather Squadron. He later was promoted to the Director of Training Operations for the squadron in 2012 before joining the National Weather Service in 2013 as a Meteorologist at NWS Pendleton, OR.

During his time at NWS Pendleton, Dr. Bieda oversaw climate efforts for the office and later trained as an Incident Meteorologist. As he quickly gained knowledge of the local environments, Dr. Bieda assisted with office science and training efforts leading to his appointment as Acting Science & Operations Officer for NWS Pendleton in 2015. During his appointment, Dr. Bieda was later selected as the Science & Operations Officer for NWS Amarillo where he has since served over the last 5 years.

Tips

First and foremost, know that government meteorology jobs are highly competitive, though that is mainly true at highly desirable locations. If you are interested in just gaining entry as a government meteorologist, you may have to serve a stint at a location that might not be as highly sought after in order to get your foot in the door. As someone who assists a hiring official, I normally look for volunteer experience assisting federal meteorologists or other temporary internship positions and, absent that, private sector or related experience to help stratify candidates.

In terms of individual qualifications, we seek out any candidates that show initiative, are capable of handling stressful environments, can multitask especially during busy events, and show that they can work with others. Having references, or even letters of recommendation, help us figure out whether the candidate has the temperament to work at a given office, with us often times calling them along with former supervisors/employers to glean information that may help us decide. To reach to the management level of the National Weather Service, having the ability to program (especially Python/GIS) and conduct outreach work will help you get hired at an NWS office.

I wish I had known...

I do wish I had taken more time to develop my leadership skills that would help with conflict management given the roles I have been in over the years. Though early in my career, conflict was addressed differently than it is in the civilian sector, it is truly a different matter in and of itself on how one approaches it. I would also have taken more opportunity to develop my Emotional Quotient (EQ) in order to improve my interpersonal and communication skills both internally and externally. Aside from these aspects, I have been most honored with all the opportunities that have been presented to me so far in my career.

Dr. Bieda is also the Chair-elect for the AMS Board for Operational Government Meteorologists. The current chair, Ryan Ellis, is profiled on Page 16.

Tips and Advice from Current Government Meteorologists

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lamont.bain@noaa.gov

Tips

The biggest tip for prospective students is to get your foot into the door! Whether this is a paid Pathways position or being a volunteer, having exposure to NWS operations prior to applying will be very beneficial.

Bio

I graduated from the University of Oklahoma in 2007 with a B.S. in Meteorology and a Mathematics Minor. During my time, I worked as an undergraduate research assistant for NSSL/WRDD, volunteered at NWS Norman and was an active participant in the Oklahoma Weather Lab (OWL) forecasting organization.

For my graduate work, I attended the University of Alabama in Huntsville and received my M.S. in Atmospheric Science in 2011. At UAH, I operated a Polarimetric C-Band radar on a variety of convective modes and completed my thesis on Deep Moist Convection across Northern Alabama during the Deep Convective Clouds and Chemistry Experiment (DC3). I also volunteered at NWS Huntsville where I became upper air certified via the NWS in Birmingham.

After graduation in 2013, I worked for a private weather firm in Houston, TX for about 6 months before I moved onto the NWS full-time. My first full-time NWS position was as a Meteorologist Intern at NWS Fort Worth/Dallas in June of 2014. Roughly a year later, I was promoted to General Forecaster. In spring of 2020 I was promoted to the position of Lead Meteorologist at NWS Fort Worth/Dallas.

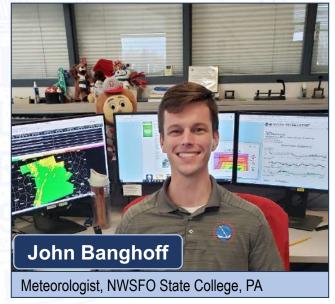
I wish I had known...

I wish coming out as an undergraduate I was prepared for how competitive it would be and how much more experience I needed. It's not impossible to get into the NWS with a B.S. and relevant job experience, however!

Bio

My name is John Banghoff, and I currently work at the NWS WFO in State College, PA, where I have been for the last two years. I received a BS in Atmospheric Sciences from The Ohio State University. Through the course of my undergraduate work, I was fortunate to gain experience at NWS Wilmington, OH, NWS Atlanta, GA (Hollings), Franklin County (Columbus, OH) Emergency Management, WSYX/WTTE (Columbus, OH), and the Columbus Crew Soccer Club (Major League Soccer). As I was finishing my undergrad, I was still unsure of what I wanted to do with my life, so I decided to go to grad school.

I got my MS in Meteorology from Penn State, where I worked on clear-air radar phenomena including using dual-pol radar to estimate boundary layer depth and developing a radar-based climatology of horizontal convective rolls in Central OK. Volunteering at NWS State College was an invaluable opportunity that undoubtedly influenced my eventual job offer from the office while I was finishing up grad school work.



john.banghoff@noaa.gov

Tips

Get into an NWS office! Volunteer, job shadow, apply for the Hollings Scholarship, apply for Pathways. Whatever it takes, get experience at an NWS office. I believe my experience at 3 different offices through undergrad and grad school was vital. Secondarily, attend conferences like NWA to network with NWS folks and consider going to grad school. Getting hired at the NWS is competitive, but if you can make a good impression and have high-quality references, your chances will greatly increase.



jamie.enderlen@noaa.gov

CWSU stands for Center Weather Service Unit. These units work directly with Air Route Traffic Control Centers across the CONUS and Alaska.

More info: weather.gov/jetstream/cwsus

Bio

I am the Chicago Center Weather Service Unit Meteorologist-in-Charge. The CWSU is a team of four meteorologists (including the MIC) who provide on-site impact-based decision support at Air Route Traffic Control Centers across the country. We help FAA controllers keep air traffic flowing as efficiently as possible while avoiding hazardous weather like convection, icing, and turbulence.

After graduating with a B.S. in Meteorology from Valparaiso University and a M.S. in Atmospheric Science from SUNY Albany, I began as an entry-level meteorologist at NWS Charleston, WV. My next office was NWS Chicago, IL, where I was a hybrid forecaster. I mainly worked at the Weather Forecast Office, but also worked regular shifts at the Chicago CWSU. Working at the CWSU is the most rewarding and challenging job, so it was a dream come true to become the Chicago Center MIC.

Tips

- When there is a government shutdown, we are impacted. Especially if you are new to federal service, have savings and a plan in case a shutdown occurs and you do not receive a regular paycheck. We have no control over whether or not there will be a shutdown. The only thing you can control is whether or not you are prepared.
 - Some locations will be very hard to afford on an entry-level salary, even with locality pay.
 - Reach out to your new MIC/HIC or new coworkers for help regarding housing, getting a lay of the land, etc. They want to help you settle in.
 - You may be the most experienced person on the panel, but if you do
 not have the specific skill we are looking for, you may not be selected.
 If we already have a GIS guru, we may not need a second one. There
 is no way for you to know that ahead of time, but don't let the
 disappointment discourage you.

I wish I had known...

- Create a USAJobs search that notifies you every day. Vacancies are briefly open, so you want the maximum amount of time to perfect your application package.
- DO NOT apply for a job or location if you do not intend to accept a job offer. If you receive more than one job offer (which may happen if multiple offices are listed on the same opening), then you have to turn down an office, so it is to be expected.
- The HR specialist listed at the bottom of the vacancy determines whether or not you are qualified for a position. The HR specialist is not a meteorologist, so you need to make it clear why you are qualified for the position. A few tips are to speak specifically to how you meet the specialized experience listed in every vacancy announcement. Also use your resume to defend your level of experience answers in the vacancy questions.
- Consider including two resumes: a long resume to help the HR specialist rate you as highly as possible and a second, shorter resume (3 pages tops) for the selection committee to read.
- The selection committee will have 10+ resumes, cover letters, etc. to read. They will not read everything you send, so make sure the most important or recent experience is listed first.
- You can show personality in your resume by listing hobbies, using color, etc., but still keep resumes professional.
 Everyone on the panel has similar experience and a meteorology degree; we want to see who fits with our team and has the skills our team is lacking.
- Always have questions to ask the selection committee after your interview, and more detailed questions than when will you make a decision. One memorable interviewee had a question for every person on the selection committee.
- Showing you are a team player, passionate, have awareness, want to learn, and excellent communication skills
 may matter more than your GPA and technical skills. Everyone has a meteorology degree, but not everyone has
 these unteachable skills.

I am currently the Meteorologist-in-Charge at WFO San Diego (since 2017). I began at the WFO Houston/Galveston office in 1998, where I served as intern, general forecaster, and lead forecaster. In 2011, I was promoted to Emergency Response Specialist - Team Lead at WFO New Orleans/Baton Rouge. There, I led a team that was tasked with building a whole-office decision support training and deployment program with recommending best practices to NWSHQ. Following that position, I became Meteorologist-in-Charge at WFO Florida Keys, where I served from 2015 to 2017, culminating in the landfall of Hurricane Irma. I have been in the NWS for over 21 years, but meteorology is actually my second career! Prior to entering the NWS, I served as a computer analyst for MCI Worldcom for about 2 years during the "dot com" era.

Tips

Your best way to get hired as a government meteorologist is to get your foot in the door early through the NWS volunteer program or Pathways. These candidates often rise to the top of the list on a set of applications. Ways that you can stand out during college: participation in conferences like NWA/AMS, research projects, and working with emergency managers. For your resume: always include references, including their name, job title, and contact information. They should be people that can objectively evaluate your work (e.g. supervisors or professors). If you are selected for a NWS interview:



matthew.moreland@noaa.gov

practice, practice, practice! Be prepared for questions ranging from life lessons to strengths to science to how you handled difficult interpersonal scenarios.

I wish I had known...

I think the importance of both starting networking early/getting connected with mentors and having solid letters of recommendation to back up your application. I finally figured the importance of the letters of recommendation after I had applied for like 20 sites. All of a sudden, my application was at the top of the heap! For networking, I did a solid job in college on this, but could have started earlier and done more!



Tips

Bio

general forecaster.

Volunteer! Being a student volunteer allowed me to see what working at a NWS WFO would be like and make sure it was what I wanted to do. It also allowed me to show them that I'm willing to work hard, even without being paid. From that summer volunteer experience, I was able to get a letter of recommendation that helped me into the SCEP program (now a slightly different program called Pathways), which ultimately got me a permanent job after graduation.

I'm a meteorologist at WFO Rapid City, SD. I started as a volunteer at WFO Sioux Falls, SD one summer during college, which helped me get a SCEP position there the following summer. I was able to work at the Rapid City office during school. Once I graduated with my bachelor's degree in Atmospheric Sciences from SDSM&T in Spring 2010, I obtained an intern position at WFO Aberdeen, SD. I spent a little more than a year there, before I was able to transfer back to WFO Rapid City. In Fall 2014, I was promoted from intern to

NWSFO Rapid City, SD

Meteorologist,

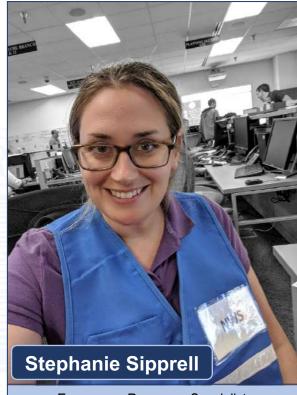
katie.pojorlie@noaa.gov

I wish I had known...

Don't think your college education will provide you with the knowledge you need to work as an NWS meteorologist. There is a ton of on-the-job training, both formal training and just gaining experience, that will be crucial to your development as a forecaster. Page 3

I knew early on that meteorology was my calling, so I began my career path as a volunteer at the Louisville, KY WFO. As a volunteer, I worked 40 hours a week during the summer without pay. My dedication paid off, and I was fortunate to receive a SCEP position (now Pathways) and worked at the Northern Indiana and Chicago WFO's while still in college. After school, I worked out of the Wichita, KS WFO and then was promoted to general forecaster at the Boston office. While at the Boston office, I prepared forecasts out to 7 days and also issued watches, warnings and advisories for this busy metro, aviation and marine region. The office is also heavily involved in supporting local and state emergency management. Several events that I have been onsite to provide weather information include the Boston Marathon and the Boston Pops 4th of July spectacular.

I am currently an Emergency Response Specialist (ERS) for the National Weather Service's Central Region Headquarters. As an ERS, I work shifts at the CR Regional Operations Center to provide operational and logistical field support, IDSS to regional and state-level partners for weather, water, and climate, coordinate any IDSS during high impacts events across the region and report significant events and IDSS to NOAA/NWS Leadership. Our 3 main partners are FEMA Region V, VII and VIII, and I serve as the primary liaison for FEMA Region V out of Chicago. I also focus on Ecological Forecasting, including Harmful Algal Blooms and Nutrient Runoff, and run large-scale regional exercises.



Emergency Response Specialist, NWS CRH, Kansas City, MO

stephanie.sipprell@noaa.gov

I wish I had known...

I was prepared on what to expect when applying for a government job. I do think having a better understand of the hiring process and how to navigate USAjobs would be beneficial. Try to learn and beat the system.

Set yourself apart.

You need to think outside the box on how you are going to rise to the top compared to other applicants.

Also be willing to move around. This job has allowed me to work with a variety of customers (farmers to metropolitans), landscapes (Flat plains to Ocean), and weather phenomena (Tornadoes, Hurricanes and Nor'easters). Be willing to keep learning.

I also recommend to take communication classes. In this job, you have to find a way to communicate upcoming hazards to the public and your partners. GIS and computer science are also great classes to take for the NWS.



steven.lack@us.af.mil

Bio

My name is Steve Lack (BS 2001 Penn State, MS 2004 and PhD 2007 University of Missouri). I am currently the Chief Data Scientist for the 16th Weather Squadron in the United States Air Force. My current role involves leading efforts to advance data science and analytics to provide environmental intelligence for a diverse range of users in the Department of Defense and other agencies. This includes work in data engineering, Artificial Intelligence/Machine Learning (AI/ML) pipelines, verification and validation, and other statistical methods.

During my time at Penn State, I took some interesting undergraduate/graduate courses as electives my senior year. This gave me some insight on the expectations of graduate work and exposed me to research in areas that I found interesting; in my case, radar meteorology and hydrology. I was also fortunate enough to have undergraduate teaching experience as an elective my senior year, helping immensely in communication skills. I continued into higher education as there was an ongoing federal job freeze around my undergraduate graduation. I selected the University of Missouri from a position announcement I found online, as the professor was involved in my research interests, and luckily I was accepted into a funded RA position. My advisor had international contacts and I got

plenty of good exposure to the international research community. During my MS, he obtained a research grant joint with the Dept. of Statistics at Mizzou, and I stayed on for my PhD. Most of my work there involved spinning up on graduate level statistics, working through basics of Al/ML, and creating advanced verification methodologies to evaluate our new nowcast algorithm. Working on verification methods during my MS and PhD allowed me to be involved in several international verification efforts, giving me more exposure to that specialized field. A few months before completing my PhD, I was lucky enough to land a cooperative institute job though the University of Colorado-Boulder (CIRES) in the Global Systems Division (GSD) at NOAA/ESRL working on verification for aviation interests. After 5 years, with my experience working with the FAA and aviation forecast and validation efforts, I moved to a federal position as a Techniques Development Meteorologist at the Aviation Weather Center. I worked as the Aviation Weather Testbed (AWT) lead for most of my 5 years at AWC, interacting and partnering with several agencies on research-to-operations activities. I served as acting Science and Operations Officer before leaving AWC for the 16th Weather Squadron, remaining a federal meteorologist. I began my role at the 16 WS on the global modeling team and recently was named as the Chief Data Scientist for the new Data Science and Analytics Flight given my background. In doing so, I transitioned from a 1340 meteorologist to a 1515 operations research analyst.

Tips

- 1) As an undergraduate or recent graduate, look at where the field as a whole is moving. Today, outside of core physics and meteorological courses, a firm knowledge of computer science and statistics is essential. Take extra courses or get additional training, if your schedule allows, as these skills will set you apart in getting into graduate school or going into any meteorology career field, including at a Weather Forecast Office (WFO).
- 2) Experience matters! Few people are lucky enough to get into a government position right after graduation. Look for opportunities everywhere, not just those listed on meteorology job boards. Coding and research analyst jobs can be obtained outside of weather. Be open to a temporary solution to sharpen your skills.
- 3) Skilled communication is a necessity in scientific fields, period! Every professional job I have had required communicating to other researchers, senior leadership, and the public. I look for experience in communicating effectively to these different levels.
- 4) Obtaining a federal job can be discouraging and requires resiliency. It has helped my sanity to discuss both successes and failures with others. You are not alone.

I wish I had known...

I wish I had known how to effectively use USAJOBS. It helps to contact someone that has had success making panels (i.e., getting past the initial screening). The second part is how to shape your resume to meet expectations of the hiring panel, which can vary widely. Understanding the ins and outs of the USAJOBS system is extremely valuable for job seekers and future hiring officials.

I have a BS in Engineering Physics from Westmont College, and an MS in Meteorology from the University of Oklahoma. I started my career with the NWS in Norman, OK at the Warning Decision Training Division (WDTD) in 2003 right out of grad school. I worked there for eight years as an instructor, specializing in severe weather warnings and radar analysis. In 2011, I moved to the Washington D.C. area to work in the NWS's front office. After working with the NWS Director, Deputy Director, and the NOAA Administrator as a Program Coordination Officer (PCO), I became the Deputy Chief of Staff and was the Acting Chief of Staff of the NWS until July 2016.

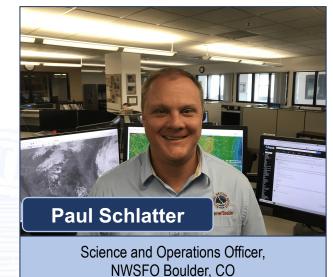
My passion has always been for Operational meteorology, and since August 2016 I have been the Science and Operations Officer (SOO) of the National Weather Service Forecast Office in Boulder, CO. As SOO, I am responsible for ensuring new science and technology are incorporated into operational products and services. About 1/4 to 1/3 of my role is shift work, which I enjoy very much given the varied climate in Colorado. Radar shifts during the convective season are just about as good as it gets for me.

Tips

Be well-rounded. Hiring officials in the NWS are looking for those that are more than just great at meteorology. Emergency management, broadcast meteorology, other communications... those fields are nice to have when trying to get into NWS.

Volunteer at an office first. You can cold call/email an office near you to see if they are taking on any volunteers.

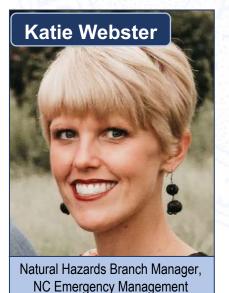
Apply for multiple places. You can't be picky about which office you want to work in. Getting your feet in the door is the biggest hurdle, but made slightly less so if you apply to as many locations as possible.



paul.schlatter@noaa.gov

I wish I had known...

The quality of candidates applying for NWS is absolutely outstanding. It's like applying for grad school at Harvard. Just getting an interview is impressive and it's splitting hairs at that point, so EVERYTHING matters. Your resume needs to be perfect. Your writing samples need to be perfect. Your interview needs to be relaxed, confident, and the right level of enthusiasm. If you fake anything or are not true to yourself, the interview panel will be able to tell.



katie.webster@ncdps.gov

Bio

I graduated from NC State (2010) with a Bachelor's degree in Meteorology and from Millersville University (2014) with a Master's Degree in Emergency Management. After working as a contractor with the National Weather Service for 2.5 years, I assumed the role of meteorologist with NC Emergency Management in July 2013. As the Natural Hazards Branch Manager, I now organize and implement planning efforts for all natural hazards that pose a threat to North Carolina. During times of disaster, I work at the State Emergency Operations Center (SEOC) providing continuous meteorological and planning support to the State Emergency Response Team (SERT).

Tips

Brush up on basic meteorological applications prior to an interview. Be willing to take a position as a stepping stone to your ideal job. Research the company/line of work before interviewing to understand their mission, recent work and basic terminology. Utilize free, online training that's geared toward your pursued field, if possible.

I wish I had known...

The state application process can be different than those for federal and private sector jobs. The interview process is very scripted and relies on a question and answer session in order to be fair to all applicants.

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felecia.bowser@noaa.gov

I wish I had known...

How important it is to have a mentor prior to applying for a National Weather Service position. Having guidance early on is key in setting you up for a bright

Bio

Felecia Bowser is a native from the Garden State of New Jersey, and pursued her passion of meteorology by attending The Pennsylvania State University in State College, Pennsylvania, where she received her B.S. degree in meteorology in 2002. She furthered her studies by obtaining her Masters degree at Texas Tech University in Lubbock, Texas in 2004. Felecia took operational weather classes in college, but gained even more insight when she volunteered at the National Weather Service in Lubbock, Texas. From there, she obtained a Meteorologist Intern position in 2004, and the next fifteen years led her to climb the ranks within the National Weather Service as a Journeyman Forecaster in 2008, to a Senior Meteorologist at the Shreveport, LA office and finally a promotion to the Warning Coordination Meteorologist at Jackson, Mississippi. She is extremely active in mentoring young students, particularly young girls, about the diverse meteorological careers, and motivating them to do well in the math and sciences.

Tips

One of the things I wished I did before I entered into the National Weather Service (while still in college) was volunteer at a local National Weather Service. This way, you will know if operational meteorology is what you truly desire. Aside from applying the equations you learned in college to use operationally, people need to take into account the shift work that is also involved with working at a National Weather Service office. Will this work for you and your future family plans? Lastly, do not be afraid to ask the meteorologists on station and the management on station a lot of questions about how they got to their position. You can learn a lot from someone personal stories.

future! I personally got a late start in acquiring mentors, and luckily I still fulfilled my dreams (and continue to do so). However, I believe I could have reached my current position a bit sooner with guidance.

Gordon Brooks

Meteorologist, US Air Force

brooksgordon@gmail.com

Bio

I've been working for the Air Force as a civilian meteorologist for 25 years now. I've worked on almost every derived parameter algorithm you can think of at this point: Precipitation type, severe weather indices, icing, turbulence, dust concentration and transport to name many, but not all. Working for the Air Force is unique, and you have to really understand weather impacts on all different

kinds of operations and the user's requirements. Equally, you need to understand how the weather products you create will (and should) be used. Non-meteorologists don't always know what to ask for, and sometimes you need to be proactive, developing and selling new capabilities to them.

I began with a few different forecasting jobs out of college to include hail suppression and rainfall enhancement at a weather modification program in North Dakota and fire weather forecasting in Alaska. I encourage you to seek out forecasting jobs and travel the country (and world) if you get the opportunity. Everything you do in every job helps build up your skillset, whether you realize it at the time (you usually don't exactly...) or not. Long story short, after making tax-free pay at a weather forecasting job overseas, I chose to wait for my next weather job instead of taking a pay cut to join the NWS in a field office. I ended up working at NWS headquarters writing Technique Specification Packages for AWIPS. This was also a super and unique job at which I learned the art of well-written requirements. Learning this skill has proved useful so many times since; not many people know how to articulate requirements nor do they understand why they are so important—until they get something that doesn't work as they had expected and it is too late. After three years of that, I threw my name into the hat for a Government job, fully expecting to go to the first NWS Forecast Office that came calling. Instead it was a Lt Col in the Air Force that saw my resume one day... a little over 25 years ago.

Gordon Brooks

(continued)

Tips

Since we're always working on high priority issues for typically young forecasters, the background I have of actually having been a forecaster in various jobs is absolutely irreplaceable. I encourage participation in field experiments, and take on

forecasting jobs (even if you know they are seasonal or temporary), especially if you aren't sure exactly what you want to do in weather quite yet. Every job you have will provide unique experiences for you to grow upon. Don't be afraid to travel to a new place for a seasonal job.

I wish I had known...

It can be hard to really know what the process of "getting things done" is like before you "are in the thick of it" at your place of employment and experience it first-hand. If you knew how to ask *the right* questions to people that already work there, you could acquire some additional information that might be useful. Of course, I realize that a potential new employee might have some trepidation toward doing this, but perhaps you would have some contacts available through professors, other students, or other colleagues in your network (or, perhaps, the AMS BOGM!) that can help.

Along those lines make sure you know what the job will entail as best as possible... it might not be as straightforward as you'd think.

Bio

Growing up in the Chicago metropolitan area, I had the pleasure of experiencing a wide array of weather phenomena ranging from nocturnal mesoscale convective systems, raging January snowstorms, blustery fall storms, and even occasional tornado outbreaks. My boyhood interest in weather developed into a flame of fascination which burns in earnest inside of me today.

I graduated from the University of Oklahoma with a Bachelor of Science degree in Meteorology in May of 2016 and worked toward a Masters degree in Meteorology at North Carolina State University from August of 2016 to August of 2017. I did not finish my Masters work, as I applied for and was offered a position with the National Weather Service prior to completing my degree. Indeed, I started my career with the NWS in September of 2017 at WFO Marquette, MI as a meteorologist intern. In May of 2018 (and after 175 inches of snow), I was promoted to general forecaster at WFO Grand Rapids, MI. In February of 2020, I transferred to WFO Chicago, IL, which is where I continue to work today under the position title of "meteorologist." I have varied interests in meteorology, but am most interested in severe convective weather with an emphasis on mesoscale convective systems. I currently serve on the National Weather Association's Weather & Forecasting Committee, and enjoy working with students.

Tips

There is a concept in the working world called "PIE" - Performance, Image, and Exposure. To be a qualified candidate for any job, one must be able to perform the needed work and maintain a professional image. However, the largest slice of the "PIE" is exposure, as all your hard work toward your performance and image would mean nothing if nobody knows who you are. As such, the most important tip I can offer to those with an aspiration to get hired as a government meteorologist, or in any job field really, is to build and maintain a diverse and robust network across the entire community, spanning across the academic, private, and government sectors. There is no doubt in my mind that the network I continue to maintain has been an integral part of my success, ranging from preparing for my first interview at WFO Marquette to my current position at WFO Chicago. Also, be careful with what you post on social media and indeed how you convey your image. You would be surprised at how far tweets can reach.



brett.borchardt@noaa.gov

I wish I had known...

I wish I understood the mental toll that can come with being an operational government meteorologist. Working odd hours, during weekends, and occasionally on holidays can create feelings of mental anguish and distance from your loved ones. If you are serious about becoming a government operational meteorologist, make sure you are able to develop or already have a healthy social network, exercise routine, and positive attitude to combat spells of mental negativity. With all of that said, knowing you alone can use your passion to make a positive difference in the lives of others is incredibly rewarding and worth it.

I am the team lead for a group that tailors model-generated information as needed to help decision making in the DoD. This mainly includes algorithms that have mission information as input (e.g., contrails), that predict variables the model does not (e.g., lightning), variables where we wish to improve upon a sub-grid parameterization (e.g., peak wind gust) or indices like CAPE or wind chill.

I have my MS in Met/Clim, have worked with the USAF for 19 years since getting an internship there as a junior in college. Started on algorithms, worked to train forecasters to provide backup to AWC/SPC for a spell, then did regional modeling and ensemble development for about a decade, then led verification and now product tailoring.

Bio

Evan Kuchera 16th Weather Squadron, Offutt Air Force Base, NE

evan.kuchera@gmail.com

Tips

Add software development or cyber security knowledge to your talent stack. Show via your activities that you can work well with diverse groups of people. Network by showing an interest in what prospective organizations are all about.

I wish I had known...

Recognize that if you are creative and innovative that it will always be an uphill battle, but someone has to push the government forward.

Cindy Elsenheimer Emergency Response Specialist, NWS SRH, Fort Worth, TX

cindy.elsenheimer@noaa.gov

I have a B.S. degree in meteorology from Northern Illinois University and a M.S. degree in meteorology from the University of Hawaii. I started my meteorological career in government as the State Meteorologist in Alaska, where I issued air quality forecasts and participated in air quality field projects. I moved into federal government employment by joining the NWS at the Atlanta Center Weather Service Unit, then was a general forecaster at the Amarillo, TX weather forecast office. I was promoted to Lead Forecaster at the Jacksonville, FL weather forecast office, where I mentored NWS interns as they became acquainted with the products and processes of the NWS, and led the student volunteer program where students completed research projects and are introduced to NWS forecast operations. Currently, I am an Emergency Response Specialist at the Regional Operations Center at Southern Region Headquarters in Fort Worth, TX. This position isn't as focused on day-to-day forecasting operations, but focuses more on supporting core, regional NWS partners during high impact events, as well as supporting NWS field offices.

I wish I had known...

I wish I would have done it sooner! It wasn't exactly what I pictured for myself when I was in college, so I didn't volunteer or network with many NWS meteorologists. But now, I can't imagine doing anything else. Be open minded, and think long term.

In addition to local forecast offices and national centers like the Weather Prediction Center, the NWS also has regional headquarters, each of which contains a regional operations center. These serve as a liaison between the national operations center and local offices and serve regional partners such as FEMA.

Tips

Volunteering, internships (paid or unpaid), as well as networking are the keys to becoming a government meteorologist. Networking is a critical resource for the application process. Patience is also key—both the hiring process and initial starting salaries don't always move as fast as one would like, but once you are employed, promotions happen rather quickly if you are motivated.



trevor.boucher@noaa.gov

Tips

It's easy to think that being the best meteorologist with the highest grades and top forecasting scores are impressive and will get you the job you want. It won't. The tough reality is the 2nd best meteorologist with a resume of varying other specialties actually has more value. What do YOU do that nobody else does? It may not seem to be a direct connection to your job, but don't forget, the weather affects everything. How does the weather interact with your uniqueness, and how could it help others?

Also, the federal government is a bureaucracy. What is a bureaucracy? It's people. Lots and lots of cooks in the kitchen. So you NEED to know how to interact, work in teams, be inclusive, and be respectful. There are literally no individual accomplishments in the NWS.

If you don't or you won't, your maximum potential is like winning a sports scoring title but never winning the championship. Over time, you have a track record of being one-dimensional and it never translating to team success. So teams become much less inclined to bring you on over time, despite your talent. Especially if you go to social media to complain about your playing time.

Bio

My name is Trevor Boucher. I am a Lead Meteorologist at the NWS in Las Vegas. This is my 4th NWS office I have been to since 2008 (Lubbock, Nashville, Austin/San Antonio). I received my bachelor's degree in Geophysics and masters in Atmospheric Science from Texas Tech University.

I came into the NWS by simply asking questions. I asked the WCM at a spotter talk if there were any internships/volunteer opportunities, and he let me know. I volunteered for two full years before an opportunity for a paid internship came up. While in school I also minored in American Sign Language, which come to find out was exactly what my first full time office was looking for (Nashville), even more so than my weather background. From then till now, I have made a career out of specialized outreach for the Deaf.

I wish I had known...

I wish I had some better understanding of what constitutes a good NWS resume early on. I had to take some humbling feedback to get it right. Vet yours through as many hiring officials as you can. Their feedback is gold.

Also, an interview is more about getting to know you than it is testing your competency. Your resume implies that. That's why you got the interview. So it's not about getting the correct answers to questions you don't know off the top of your head. It's about how you react to the question. *Relax and be honest.*

Learn more about Trevor's outreach for the Deaf and hard of hearing community in this recent NOAA Education article.

Andrew Kobularcik

Flight Chief, 16th Weather Squadron, Offutt Air Force Base, NE

andrew.kobularcik@us.af.mil

I wish I had known...

I honestly wish I would have known about my options sooner. If I would have joined right out of High School, I would have been 5 years closer to retirement.

Bio

My name is Andrew Kobularcik, and I am from the great state of Kansas. Currently I am a Flight Chief in the 16th Weather Squadron at Offutt AFB, NE. The way I became a meteorologist was by joining the United States Air Force. After basic training, I was shipped off to Keesler AFB, MS, where I underwent an intense 8month training program for meteorology. After this training, I went to my first duty station at Scott AFB, IL, where I would learn the craft by partaking in a 2-year on the iob training program where I would get more hands on time writing forecasts and issuing advisories, watches, and warnings. From Scott AFB, IL, I went back to Keesler AFB, MS, where I became an instructor at the Weather Training Complex. I spent the next four years teaching meteorology to students from the Air Force, Navy, Marines, Coast Guard, and around the world. After my teaching assignment, I was then assigned to Offutt AFB, NE, where I am now in charge of a 24 person team of civilians and military where we primarily focus on models and tailored meteorological applications. The past 10 years have been guite the journey, and I feel that the Air Force is a good path to take if you are interested in becoming a Meteorologist.

Tips

The easiest path, in my mind, to becoming a government meteorologist is to join one of the branches that offer a meteorology path. Put in enough time and you get to use the G.I. bill to further your meteorology education, if so you choose. Also, if you put in 20 years, you will be able to retire from the service with a pension and enough experience to open doors to endless possibilities.

Bio

Alek Krautmann is a program analyst and science advisor for NOAA's National Environmental Satellite, Data and Information Service (NESDIS) headquarters in Washington DC. He has also served as a NOAA Program Coordination Officer in providing senior staff support to the office of the NOAA administrator and as a policy advisor for satellites and environmental data. Prior to work in DC, Alek was a meteorologist at the NWS New Orleans/Baton Rouge office. He was previously a Research Associate with the Southern Climate Impacts Planning Program (SCIPP), which is a NOAA Regional Integrated Sciences and Assessments team at the Oklahoma Climatological Survey in Norman, OK. Alek works to promote an informed society: one that anticipates and is able to respond to the weather and climate hazards in our world.

Alek is originally from St. Louis, MO. He is a graduate of Ohio University (M.S. Geography) and the University of Oklahoma (B.S. Meteorology), including a semester abroad at Monash University in Melbourne, Australia. He completed the AMS Summer Policy Colloquium in 2011, Early Career Leadership Academy in 2019, previously served on the Student Conference Planning Committee, and is currently on the AMS Committee on Applied Climatology. Outside of work, Alek enjoys swimming, biking, and running with the November Project.

I wish I had known...

Any government position is public service. There is a larger purpose for the common good of all citizens, which makes the mission of various agencies so special. This also makes inclusivity especially important in government work. For government jobs specifically, your application and experiences need to align closely with the listing and mission of the agency. Think comprehensively about how your experience is relevant to the job in question and carefully document all aspects. An understanding of the larger organization and how your role fits in is important.

Government jobs are more flexible than you might think. For example, switching between programs or offices in DC is relatively common. So are detail positions, which are temporary assignments to a different position.



NESDIS, Washington, D.C.

alek.krautmann@noaa.gov

Tips

- Keep your interests broad like environmental sciences in general.
- Build your toolbox be interdisciplinary.
- · Seek new experiences.
- Stay informed of news and current events.
- How do your interests fit into your potential field? How is your field changing?
- Gain more familiarity with professional organizations like AMS, NWA, and AGU.
- Volunteer! Be a servant leader in your community.
- Strive to be a servant leader in your professional activities.

My name is Jordan Thies, and I'm a Meteorologist at NWS Hastings, NE. I attended college at the University of Nebraska-Lincoln, where I obtained a B.S. degree in Meteorology/Climatology and a minor in Mathematics. The teacher of one of my favorite classes (Severe Storms) was actually, at that time, the SOO at NWS Omaha. He emphasized how important it is to volunteer or some how become involved in an operational environment in college, in order to network and truly

Jordan Thies

Meteorologist, NWSFO Hastings, NE

jordan.thies@noaa.gov

understand how the operational environment works. That led me to pursue a volunteer internship with the WFO in Hastings as part of my last semester. I received invaluable experience, advice, and relationships during that time that would no doubt help me achieve my professional goals in the future.

Upon graduation, I was hired by a private meteorology consulting firm in Kansas City, where I would go on to work for the next five years. In that time, I became a Senior Consulting Meteorologist, providing DSS for a wide variety of customers ranging from utility companies, municipalities, snow removal operations (big and small), airports and professional baseball teams. Every day I was able to help the customers make routine (but sometimes difficult) decisions that impacted safety and their bottom line. It was very rewarding, and the experience allowed me to sharpen my meteorology skills, but also customer service skills. It had also been a goal to return to the NWS, and so when NWS Hastings had an opening, I applied and contacted the MIC to let him know. This pre-established relationship was crucial to me getting an interview and ultimately being hired because I didn't have research experience or an advanced degree. However, they knew who I was and what they would be getting if they hired me. They knew things about me that are difficult to express in a resume or cover letter, such as personality, work ethic, and customer service. The five years of experience providing DSS in private consulting meteorology space was also a huge plus.

I wouldn't be where I am today if it wasn't for volunteering at an NWS office, establishing quality relationships, and venturing outside of the government space first, in order to gain experience.

Tips

Do whatever you can to establish relationships within NWS, such as volunteering for a semester or summer. This shows interest and passion and can allow you to demonstrate what you can bring to the position that may not be easily translated in a resume or cover letter.

The NWS Meteorologist position is not what it used to be—it's more than just atmospheric science. I wish I had taken more non-traditional studies, such as oral and visual communications classes, additional programming classes, and even management classes. These are all classes that would help you stand out among your peers and undoubtedly provide valuable knowledge that would serve you well throughout your entire NWS career.

Don't be afraid to venture out into the private enterprise to gain experience or the knowledge referenced in the previous point, which is what I did. Several private companies specialize in providing targeted IDSS, which is where the NWS has moved, and will continue to move, towards for core partners such as local, state, and federal agencies. I have definitely applied IDSS principles I learned in the private sector to my job within the NWS and have made my office and colleagues better for it.

Have a passion in something other than meteorology. I was actually told by the MIC that hired me that they liked that I had passions/hobbies outside of meteorology. He said it demonstrates good work/life balance which promotes high performing employees.

You will likely need more than one of the above because of the competitiveness of government meteorology jobs.

I wish I had known...

The application process can be daunting. The first time I applied for an NWS position, I had no idea what I was doing and how to answer some of the questions. This likely hurt my application for that round. The second time I applied (in which I was hired), I sought out assistance from contacts within the NWS who provided guidance and suggestions on how to navigate the whole process.

I am the Organizational Health and Culture Lead for the NWS Office of Organizational Excellence (part of Headquarters). In this role, I work to understand and improve the organizational culture of the NWS by leading teams of field representatives working to improve local office culture, supporting national-level initiatives to improve the employee experience, and serving as a strategic advisor on organizational culture and employee engagement to both local office management and senior leaders. In addition, I also support my office's other focus areas: strategic planning, governance and partnerships/external engagement.

I started my NWS career 9 years ago as a NWS student intern (SCEP) while finishing my B.S. in Meteorology (with minors in GIS and Geography) from Penn State. After graduation, I accepted a full-time position as a meteorologist at the State College, PA Weather Forecast Office. From there, I was a forecaster at the Morristown, TN Weather Forecast Office before joining the Office of Organizational Excellence team in early 2018. While working as a forecaster, I led local partner engagement teams, organized a student volunteer program with Penn State, and served as a field representative as part of the NWS Operations and Workforce Analysis (OWA). Outside of the

Elyse Hagner

Organizational Health and Culture Lead, NWS Office of Organizational Excellence

elyse.hagner@noaa.gov

NWS, I am active in both the AMS (serving on the planning committee for the AMS Early Career Leadership Academy) and the NWA (serving on the Social Media Committee).

I wish I had known...

Positions are highly competitive—if you don't make a hiring panel for the first position you apply for, **don't give up!** Get feedback and improve your application/skills for future positions.

Tips

- 1) Everyone is has a meteorology degree -- be sure to highlight what sets you apart on your cover letter and resume. What are your additional skills and talents? (communications, GIS, computer science, web design, teaching others, whatever!)
- 2) Know that if you want to join the NWS, you will likely be working rotating shifts/holidays/weekends at some point in your career. Everyone handles shiftwork differently and some find it easier than others. It's important to establish healthy habits (sleep, exercise, nutrition) and a good work-life integration.
- 3) Be open to new experiences! Chances are, you won't get an entry-level job in your hometown. Government jobs are highly competitive, so you increase your odds if you're willing to move to new places.
- 4) If you're still a student, look for career experience and scholarship opportunities. Within NOAA, this includes SeaGrant Fellowships, the Hollings Scholarship Program, the Lapenta NWS Student Internship Program, unpaid volunteer opportunities, and research grants. There are also government-wide paid internship opportunities that can translate to a full-time position after graduation through the Pathways Internship, Recent Graduates, and Presidential Management Fellows Programs.
- 5) Having a mentor is huge! If you have a mentor who is already a government employee, they can help keep an eye and ear out for job and internship opportunities, suggest relevant training opportunities, and review your application materials. If possible, have a supervisor in the agency you want to join review your government resume before submitting your application—government resumes are different from private sector resumes and you'll want to include a lot more information. Someone with hiring experience can give you honest feedback and catch areas where you need to supply more information.



Science Support Branch Chief, Storm Prediction Center, Norman, OK

patrick.marsh@noaa.gov

Tips

Most people who apply for a government meteorologist job are more than qualified meteorologists. This means the people you will be competing against are going to look very similar on paper.

You need to stand out. Highlight what is unique about your application. What strengths do you bring to the table that other candidates won't have? Have you been involved in training? Tie that into your application. Focus on how you can use that to further the agency's mission. Do you specialize in GIS? Communications? Etc.?

Focus on highlighting how those skill sets can be used to augment your meteorology background.

Bio

I earned Bachelor of Science degrees in math and physics from the University of Arkansas in 2005. That fall, I came to the University of Oklahoma to begin graduate work. I earned my Master of Science degree in meteorology in 2007 and just finished my doctorate. During my time here at OU, I have been fortunate to get to know Harold Brooks from the NOAA National Severe Storms Laboratory (NSSL), and he included me in many opportunities within the Norman weather community. In particular, he wanted me to participate in the VORTEX2 project, which connected me with Lou Wicker, who is also at NSSL. Through this networking, I had the unique opportunity to work in the VORTEX2 Operations Center, which led to my eventual position as NSSL liaison for the Hazardous Weather Testbed (HWT). This worked out through partnerships I developed with my mentors Jack Kain and Dave Stensrud, both from NSSL, who also established my graduate student position. I served in the role of NSSL liaison from 2010 to 2013 while also working on my Ph.D. The experiences I had with the HWT allowed me to work closely with staff at the SPC, and these opportunities were instrumental in developing the skill sets I would need to eventually work at the SPC Science Support Branch. Fortunately for me, as I was finishing up my Ph.D., a Techniques Development Meteorologist position opened up in the Science Support Branch at SPC.

I served in the TDM role for three years, focusing on operational shifts, creation of new graphics, and revamping some of SPC's internal GIS processing. In fall of 2016 I became SPC's third WCM. I served in that capacity for three years before being chosen in the summer of 2019 to be SPC's third Science Support Branch Chief.

Don't ever forget what brought you to meteorology. It's easy to lose sight of that and focus on climbing the proverbial "corporate ladder". However, in doing so there are trade offs. You may become less tied to the thing that drew you into meteorology as you focus on additional responsibilities. Make sure you understand and are ready to make those trade offs if you decide to move up the ladder or become a manager/supervisor.

Katie Magee has been a meteorologist with the National Weather Service for 3 years. Fascinated by weather since she was a young child, Katie attended North Carolina State University in Raleigh, NC for her B.S. in Meteorology. During her undergraduate career, Katie was a student intern at both AccuWeather and the National Weather Service (NWS) office in Raleigh, NC. Both of these internships helped cement her passion for forecasting and weather communication. She then earned her M.S. in Earth Sciences from the University of North Carolina at Charlotte in Charlotte, NC, with a thesis focusing on supercell interaction with surface boundaries. During her second year of graduate school, Katie became a Pathways Student Intern at the Meteorological Development Lab at the NWS Headquarters in Silver Spring, MD, where she worked on the post-processing of numerical weather models. Katie then transitioned into the operations field within the NWS, becoming a meteorologist with the NWS office serving the Houston/Galveston, TX area. During her time in Houston, Katie's passion project was developing and implementing a training plan for student job shadows, volunteers, and Pathways students.

Katie is currently a meteorologist at the NWS office in Huntsville, AL. In Huntsville, Katie is heavily involved in the local teams for aviation, decision support services, outreach, and severe weather. She also guest lectures for an operational forecasting course at the University of Alabama at Huntsville and is helping develop an advanced operations course. Katie serves on the AMS Weather Analysis and Forecasting Committee and the NOAA Women's Employee Resource Group.



kathleen.magee@noaa.gov

Tips

Don't be afraid to take those long shots! Run for club president, apply for the dream internship, try learning a new skill. Having a diverse background and unique skills will help make you more competitive for job openings.

As for specific skills to develop or amplify, give yourself opportunities to demonstrate how you work as a team member, as well as a team leader. Strong communication skills are where the NWS is headed. It is not enough to make a good forecast if no one knows about it. Show that you are able to tell your forecast in a way that the public can understand; this could be by taking some communication courses, volunteering at a broadcast station, or maintaining your own social media presence or weather blog. Do not be afraid to make a mistake; own up to it and learn from it. These types of answers to interview questions are often more impressive than saying you always have your act together, because no one ever does.

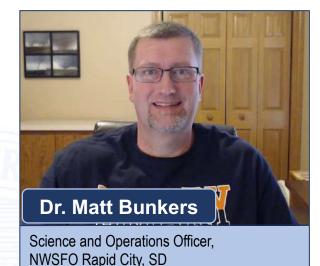
Specific Resume and Interview Tips:

- Do not worry about GPA! People focus more on what types of classes you took rather than what grades you got.
- Always include a cover letter!
- Do not just list clubs, activities, and volunteer positions on your resume, but rather speak to what your roles were and how you helped advance the mission.
- When interviewing, write down the questions asked so that you do not forget to answer one part of it.
- Back up every interview answer with examples.
- Always ask questions at the end! Do your research, and ask thoughtful questions about the office to show you are invested in office culture.

I am Matthew Bunkers and have worked as the Science and Operations Officer at the NWS in Rapid City, SD, since 2003. Prior to that, I was a forecaster at the same office since 1994. I was fortunate to get this job immediately upon graduation from SDSMT in the fall of 1993. Otherwise, I grew up on a dairy farm in eastern South Dakota, which gave me an appreciation for hard work and as well as working non-routine hours.

I wish I had known...

It would have been nice to know from the outset that things can move really slow in the government, which is frustrating. Also, the incentive to work hard isn't there for everyone, and knowing that in advance would have helped me better adjust my expectations of others.



matthew.bunkers@noaa.gov

Tips

It is important to have a Master's degree as well as a diverse background (e.g., meteorology, computer skills, graphics design, sociology, etc.). Be a hard worker and focus on your performance instead of worrying about what others are doing. Be willing to move to different offices, and also be flexible in what you are willing to do (i.e., don't type-cast yourself as more of a science person than an outreach person, and vice versa). Always have a balance of projects to work on, and develop strong time-management skills.

Bio

My name is Ryan Ellis, and I am currently the Science and Operations Officer at the NWS forecast office in Morehead City, North Carolina. My current position oversees a lot of what is happening on the operations floor and also what is going on in the research community that will eventually make its way to the ops floor. My job is to give the forecasters what they need to do their jobs, which includes training, implementing new technology, and working on local research projects to solve local forecasting problems. Prior to this position, I was a forecaster at the NWS office in Raleigh, NC for 10 years. I have a B.S. in Atmospheric Science from the University of Miami, and an M.S. in Meteorology from the University of Hawai'i at Manoa.

I wish I had known...

- 1.) You can do everything right and still not get the job. There are so many factors that go into the process that you cannot control. Don't get discouraged just keep going. A rejection is not necessarily because of something you did wrong.
- 2.) This may take a while. If you don't get a job right away, find ways to stay engaged in the field so you are ready when the next opportunity comes.



ryan.ellis@noaa.gov

Tips

- 1.) Patience! This is a competitive field with a lot of applicants coming out of college.
- 2.) Learn the application process for the job you want to apply to. Knowledge of the system is power when it comes to getting your application in front of the hiring officials.
- 3.) Connect with those in the field you want to join. They can help you with the application process and it also helps to start to build a network within the field.
- 4.) You have to sell yourself. ALWAYS do more than the minimum. Write a cover letter, even if it says you don't have to. Reach out to the management in the office you want to go to. Create a personal website showcasing your skills and abilities.

I am a meteorologist at the National Weather Service office in San Diego, California, and have been in this position for about two years. I am also currently an online Masters in Emergency Management student at Millersville University and plan to graduate this December. Prior to this first full time position, I was a Graduate Assistant for my current Masters program on campus at Millersville. I have also had internships with other NWS offices, state government, and local emergency management. Acquiring experiences like these has taken dedication, putting myself out there, and finding my true passion in my work.

I wish I had known...

The process can be quite a lot at times. Try to get as much information as you can, but you don't have to feel that you have to do it all on your own. Reaching out to someone who knows the process can really help. This is not a one page resume type job. I wish I would have known to keep track of all the little things I did that could have applied to the job.



adam.roser@noaa.gov

Tips

We often hear the phrase "actions speak louder than words." When pursuing a position in meteorology, I often think of it as "actions (speak?) louder than thoughts." Thoughts are a great starting point to organize and figure out your path. Those that put these thoughts into actions are the ones that separate themselves from the crowd. Familiarize yourself with the duties, qualifications, skills, etc. of your desired position. Most will look on the Internet for a list of some sort, but a phone number or an email of a hiring official would be even better! Making yourself visible like this will create connections and provide a focus on what actions need to be taken to gain this experience. A great example I have seen is when local AMS chapters integrate some of these skills and experiences into their outreach programs. It is great to see these students doing things that I would be doing in my position here in the NWS!



keith.sherburn@noaa.gov

Bio

I am currently a meteorologist at the National Weather Service Forecast Office in Rapid City, SD, where I have worked for almost three years. Prior to arriving in Rapid City, I was a Pathways Intern at the Raleigh, NC office for over two years while working on my Ph.D. in Atmospheric Sciences at NC State University. During my time at NC State, I served as a graduate research and teaching assistant. Prior to returning to NC State, after completing my M.S. degree, I worked at a private forecasting and consulting company in the Kansas City area. My B.S. in meteorology is from the University of Oklahoma.

Tips

- Discuss your application materials with someone familiar with the process before submitting. There are some unique quirks associated with the NWS application process that may catch you off guard or lead to you inadvertently lowering your chances of getting an interview.
- Along the same lines, if you get an interview, practice with someone beforehand. You don't want to memorize talking points word-for-word, but practicing will help you gather your thoughts and increase your comfort.
- Be true to yourself but open-minded. You will find yourself in new, unexpected situations or places. How you respond will shape your career.
- Patience and empathy are invaluable.
- Make the most of every opportunity. Everyone knows someone in the NWS; if you develop a reputation of not being dependable or trustworthy, that will be hard to shake.

I wish I had known...

Everyone at an NWS office plays his or her own role. We each have our own unique skill sets and expertise, contributing to a cohesive whole. This means that you may not be selected for a given position because you do not fit the office's need at that particular time, not because you aren't a quality candidate.

Robbie Berg is a hurricane specialist at NOAA's National Hurricane Center (NHC) in Miami, Florida. Robbie received his Bachelor of Science in Meteorology and a Bachelor of Science in Marine Science from North Carolina State University (2001). He received a Master of Arts in Communication from Johns Hopkins University (2014) and also completed some graduate work at the University of Miami Rosenstiel School of Marine and Atmospheric Science. Robbie began his meteorological career with NOAA in 1999 as a student intern at the NOAA Earth System Research Laboratory in Boulder, Colorado. While there, he did research on air-sea interaction in hurricanes. Robbie joined the National Hurricane Center in 2002 as a student intern. He was hired by the Tropical Analysis and Forecast Branch (TAFB) of NHC that same year as a map analyst and was then promoted to a marine forecaster with TAFB in 2005. Robbie joined the Hurricane Specialist Unit (HSU) in 2008, where he issues track, intensity, and wind radii forecasts as well as associated watches and warnings for tropical cyclones in the Atlantic and eastern North Pacific ocean basins.

Robbie is a presenter and participant in a number of meteorological meetings, including the American Meteorological Society's Conference on Hurricanes and Tropical Meteorology and Conference on Weather Warnings and Communication, the National Hurricane Conference, and several state hurricane conferences. He is an instructor for several courses aimed at the emergency management community, broadcast meteorologists, NWS forecasters, as well as forecasters from other countries. Robbie is the NHC focal point for the social science aspects of hurricane forecasting and outreach, and he is an alum of the Weather and Society Integrated Studies (WAS*IS) program, sponsored by the National Center for Atmospheric Research Societal Impacts Program. As a part of that role, he is on a team that coordinates NHC's social media activities. Berg is a member of the Hurricane Forecast Improvement Program's (HFIP) Socio-Economic Working Group, and he administers and writes posts for NHC's blog, Inside the Eye. He also interacts and conducts research with the NHC Storm Surge Unit to improve the operational forecasting of hurricane-induced storm surge. Robbie serves on the American Meteorological Society Board on Societal Impacts and is also a member of the National Weather Association.

I wish I had known...

It often takes awhile for novel and creative ideas to be adopted and implemented in the government. But don't get discouraged. Especially early in my career, I would



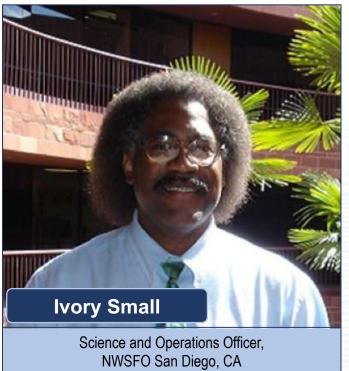
Hurricane Specialist,
National Hurricane Center, Miami, FL

robert.berg@noaa.gov

Tips

- 1. Cultivate a diverse skill set and background. Don't just focus on meteorology! We all love weather, but it's important to figure out how you can fold computer science, oceanography, communications, etc. into meteorology to make you an attractive candidate for a government meteorologist position.
- 2. Learn a language that you can use in a potential job, particularly Spanish. Government meteorologists have to communicate with Spanish-speaking communities, and in some jobs (like mine), you have to communicate with meteorologists from Spanish-speaking countries.
- 3. Be willing to accept seemingly low-grade jobs and work your way up! It's very rare to enter the government at a high grade. I started as a GS-5 but was able to rise fairly quickly. Even though I started low, the security and stability of the job was an important counterbalance.
- 4. Whether it's before or after you've been hired for a job, come to the table willing and open to learn. Instead of immediately giving your opinion on a matter, ask questions. Be curious and humble. Learn from the "old timers." They may not always be the most technologically advanced, but they've been around the block and have a lot of knowledge about how to deal with a difficult weather forecast and account for the things we don't know.

get frustrated by the slowness with which ideas were accepted, or if they were accepted at all. While I sometimes still get frustrated, I've come to appreciate that the slow, steady, and methodical process of the government ensures that we produce useful products for our customers. Remember, Rome wasn't build in a day. But did I mention I still get frustrated?:)



ivory.small@noaa.gov

Bio

I began my career launching morning soundings for the South Coast Air Quality Management District while attending UCLA in 1982, and in 1983, I began my National Weather Service (NWS) career as a CO-OP Student at the Los Angeles, CA NWS Forecast Office. In 1984, I received a B.S. degree in Atmospheric Sciences from UCLA and became a Meteorologist Intern at the NWS Office in Long Beach, CA. In 1986, I transferred to finish up my internship at the Los Angeles, CA Office. In 1988, I then became a Center Weather Service Unit Meteorologist at the Air Route Traffic Control Center in Palmdale, CA. In 1991, I transferred to the Los Angeles. CA NWS Forecast Office as a Forecaster/Aviation focal point, as well as the WSEO (Weather Service Evaluations Officer). In 1993, I was promoted on station to a lead forecaster and continued as a lead forecaster through the office move to Oxnard, CA. In 1995, I completed an M.S. degree in Atmospheric Science at UCLA and became Science and Operations Officer (SOO) at the Weather Forecast Office in San Diego, CA, where I currently hold the Science and Operations Officer position.

Tips

Take a good look at the government meteorologist opportunities that you are considering. View them from all angles, and even go as far as contacting individuals that are doing a job similar to what you are interested in. Join a professional society to make it easier to talk with individuals in the community of meteorologists that interest you. Spend a lot of time leaning about who has recently been hired for the job you are interested in, and ask what skills they developed that helped them to get the job. You will also want to ask what skill set will be needed based on how the job is expected to change.

I wish I had known...

Mainly gathering more hints prior to employment via spending time with those who have been in the field for a while (for example at meetings, conferences, and workshops) would have been helpful.

Job Resources and Lists







Feel free to reach out to any of the professionals profiled in this document if you have questions!