

Career Sheet: Aeronautical Meteorological Technician



Barbara Mandušić, Aeronautical Meteorological Technician, Croatian flight control

My name is Barbara Mandušić, I am 34 years old, and I live in Dubrovnik, Croatia. I studied geophysics (meteorology and oceanography) at the Faculty of Science in Zagreb. After graduating, I worked as a secondary school physics teacher for 8 years. For the last 6 months, I have been working as an aeronautical meteorological technician in Croatian flight control.



OVERVIEW OF THE JOB

My job consists of observing the current state of the atmosphere at the airport, measuring individual atmospheric parameters, and distributing compiled reports in the form of international meteorological codes. To understand meteorology or atmospheric elements and their influence on weather, it is necessary to know the basic laws of physics to which these quantities are subject. In addition to physics, knowledge of mathematics, IT, but also numerical methods are required.



WHAT INSPIRED YOU

As a little girl, for me, it was always interesting to watch the clouds. They fascinated me and encouraged me to think about how they are formed, what they are made of, why some are white, and some are grey. I loved observing the weather phenomena around me, so I started learning physics. It fascinated me from the beginning and when I realized it was closely related to meteorology, my enthusiasm had no end. I knew right away that meteorology is something I want to study and want to do in life.



TYPICAL WORKING DAY

When I start my day, the first thing I do is to talk to a colleague who worked the shift before me about the weather conditions that have been going on for the past few hours. Then I look at the weather forecast to know what kind of weather I can expect in the next few hours. I continuously monitor cloud cover, visibility, and weather phenomena, if any. I continuously work in cooperation with an automatic meteorology station that independently measures air temperature, air pressure, wind speed and direction and some other elements. I distribute all measured and observed elements to users (pilots etc.) in the form of international meteorological aeronautical codes.



STUDY & CAREER PATH

After graduating from high school, my affinities for science generally strengthened, which resulted in enrollment in the Faculty of Science. After completing 5 years of study, I acquired the title of mag. Physics - Geophysics. If I could choose my schooling path now, I would choose the same one again. During schooling, there were not as many opportunities for self-learning as there are today because then we did not have the internet and the technology we have now. The STEM field has always interested me a lot, so I always tried to find new ways of learning on my own, which most of my peers did not. Now at work, we often have workshops and trainings that help us to be as good as possible in our work and most colleagues are happy to participate in them.



KEY SKILLS

I think the most important skills needed for my job are critical thinking, commitment, and personal responsibility. Critical thinking is important because all meteorological elements are dependent on each other, and it is necessary to constantly apply and think about these dependencies. Commitment and personal responsibility are very important because we do a job on which all airspace users depend and that is a big number of people. The weather data we report must be accurate and representative.



CAREER PROSPECT

In addition to their profession, meteorologists often work as programmers due to well-developed IT skills and some of them work as physics teachers due to good basic knowledge of physical laws and processes.



CHALLENGES

The biggest challenge in my job is to follow the trends brought by the fast technology development.



YOUR ADVICE TO STUDENTS

My advice to students is to try to recognize their affinities and fields of interest as earlier as they can and after they do, they should dedicate themselves as much as possible and focus on those.



YOUR ADVICE TO TEACHERS AND PARENTS

Often parents and teachers do not recognize the interests of their children/students. I think it is very important that they direct children to areas of learning that interest the child and for which the student has affinities. They should encourage and support the child in his choice of career.



LEARN MORE

Aeronautical Meteorology services page of Croatia Control:

- <https://www.crocontrol.hr/en/services/aeronautical-meteorology/>

Services for Aviation page of the World Meteorological Organization:

- <https://community.wmo.int/activity-areas/aviation>

Aeronautical Meteorology Programme page of the World Meteorological Organization:

- <https://public.wmo.int/en/programmes/aeronautical-meteorology-programme>

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