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# **HOW TO BECOME A HELICOPTER EMERGENCY MEDICAL SERVICE (HEMS) PILOT**

## 0. Introduction

The path to becoming a HEMS (Helicopter Emergency Medical Service) pilot is not an easy one, but if you really want this profession, it is definitely worth the effort. Initially, it's good to understand that it will take considerable effort, time and financial resources to achieve all the qualifications and requirements needed to start a career as a HEMS pilot. However, when you do take the plunge and succeed, you will be rewarded with a job that is also a lifesaving mission. At the same time, you need to keep in mind that it may be 5-6 years from the time you start your training before you can get into a HEMS helicopter. On the following pages you will find the 10 key steps that make up the path to your dream job.



## 1. Examination for a Class 1 Medical Certificate

A pilot's medical fitness is one of the key prerequisites for his/her safe flying. There are several types of medical certificates depending on the position and type of operation you will be operating in. In this case, the so-called Class 1 (or possibly, for a temporary period, Class 2) will be important for you. As long as you are flying with an instructor on board, you do not need any such certificate. However, you must hold at least a Class 2 for your first solo flight. You only need to hold a Class 1 to obtain a Commercial Pilot's License (CPL). Although it is not necessary, we recommend that you take this examination at the start of your career as a professional pilot. It would be a shame to start investing money in training only to find out later that your medical condition will not allow you to pursue this profession. To obtain a Class 1 medical certificate, you must pass an initial medical examination at an aeromedical center. The closest ones are [The Institute of Aviation Medicine](#) in Prague or the [Wiener Privatklinik](#) in Wien. If you choose [The Institute of Aviation Medicine](#), you must first apply for the issuance of a registration number on the Czech CAA website.



This certificate can then be extended annually either at these two facilities or with aeromedical examiners, a list of which can be found on the Civil Aviation Authority's [website](#).

## 2. Radiotelephone Operator's Certificate of Aeronautical Mobile Service

According to the national legislation of the Czech Republic it is necessary to be a holder of a Radiotelephone Operator's Certificate of Aeronautical Mobile Service to operate aircraft radio stations. Although a restricted form of this certificate exists, we recommend you to get General certificate (VFL).



You must hold this certificate on your first solo flight, which is usually after about 15 hours of training with an instructor. Schedule your exam in advance so that your certificate is issued by the Czech Telecommunication Office in time and your first solo and training will not be delayed. Ask our Planning Department in advance for help. It is possible to prepare for this exam by yourself, however, we recommend taking a preparation course to ensure the exam will be passed successfully.

## 3. ICAO English Examination

To communicate in English onboard, you will need to pass ICAO English Exam.

Training course: training for the ICAO English exam is not mandatory, but is recommended. You will be able to prepare for the exam, the instructor will guide you on what to focus on and you will have the opportunity to take a mock exam. It is then necessary to obtain ICAO Level 4, 5 or 6 when taking the exam. Levels 4, 5 and 6 entitle you to communicate in English in flight with no difference. The level you obtain determines when you have to extend its validity in the future.

Examinations: the examination takes about 30 minutes and includes a written test, a conversation with the examiner and listening. All with an aviation theme.

## 4. Training for the PPL(H) private pilot license

Holder's privileges: as a PPL(H) holder you may act as PIC or co-pilot of helicopters on non-commercial flights. You cannot be paid for flying, but you can take the helicopter wherever you like, or perhaps take family and friends on a trip or holiday.

Entry requirements: the aviation regulations do not impose any requirements for the commencement of this training. However, completion of the first solo flight requires attainment of 16 years of age, obtaining a

Radiotelephone Operator's Certificate of Aeronautical Mobile Service, ICAO English (if unable to communicate in Czech) and obtaining a Class 2 Medical Certificate. Yes, you already meet all of these requirements because we advised you at the beginning to go straight to the medical examination and to apply for the radio-telephony certificate and ICAO English in advance.

Course of training: the PPL(H) training consists of approximately 100 hours of theoretical instruction and 45 hours of practical flight instruction. You will learn how to operate the helicopter safely, how to land and take off, how to plan and navigate the flight correctly, how to communicate properly and how to be prepared for various emergency situations. You will leave the training trained so that you can fly without an instructor and confidently take responsibility for others on board. The issue of a PPL(H) is subject to the age of 17.

Examinations: To obtain a license, you need to pass a theoretical knowledge examination at the Civil Aviation Authority. Here the candidate chooses the correct answer from four possible answers and a 75% pass rate is required. Most of the test questions are available online and it is therefore possible to take a mock test. You then need to take a flight with an examiner who will verify the level of skills you have acquired in training.



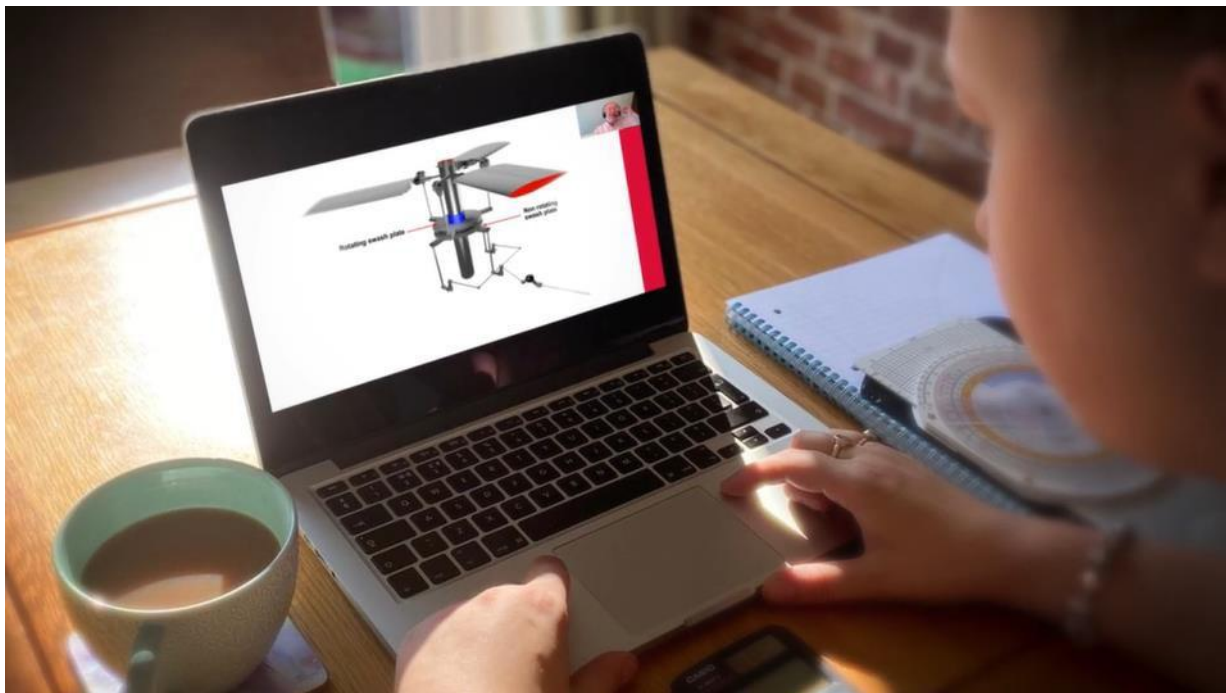
**5. Fly about 110 hours as a command pilot for CPL ... solo / time building - alone, with family or friends**

PPL(H) was the first step towards the dream. Since in a few months you will need to have flown a total of 155 hours, including at least 50 as PIC, to start CPL(H) training, you need to get started early. Where and with whom you fly is up to you. Where and with whom you fly is up to you. It is great experience to complete a few international flights during your training and time building. As part of your time-building, we recommend that you take a practice flight with an instructor from time to time to continuously practice e.g. emergency procedures.

**6. Theoretical course CPL(H) or ATPL(H) and practical course CPL(H) including night flying training**

Your current theoretical training is fully sufficient to exercise the privileges of a PPL(H) license holder. You can fly for fun, you can fly with your family or friends, but you are not yet ready for professional flying. Since you want to fly a multi-engine helicopter in the helicopter emergency medical service, you need to take the appropriate

theoretical training. So, it's time to start the ATPL(H) theory course. Alternatively, you can also take only the CPL(H) theory course, in which case you will need to complete a pre-entry course covering 4 ATPL(H) subjects Aircraft General Knowledge: airframe/systems/power plant, Instrument/electronics, Flight Performance and Planning: Mass and balance and Performance later to commence type training for a multi-engine helicopter. Many pilots today go straight into ATPL theory. For PPL(H) holders, ATPL(H) theory training includes 550 hours of study, CPL(H) theory 250 hours of study. Legislation says that the student must spend at least 10 per cent of that time in instructor-led instruction and up to 90 per cent can be spent in supervised self-study. This is, of course, on the condition that he has the appropriate study materials from his flight school, that he studies regularly according to a schedule agreed with the flight school and completes continuous tests to ensure ongoing progress in his training. Aviation regulations require the flight school to monitor the student's progress in this manner. On completion of each subject, the flying school shall issue the student with a certificate entitling him/her to take the Civil Aviation Authority theory examination. These examinations are taken electronically by selecting the correct answer from a set of examination questions. At present, the examination can only be taken in English. A pass mark of at least 75 per cent is required in all 13 subjects.



It is advisable to commence practical training for the CPL(H) after the completion of the theoretical training, but this is not a requirement. Holder's privileges: as a holder of a CPL(H) you may act as pilot in command or co-pilot in so-called commercial air transport. In other words, as a CPL(H) holder, you can make a living from flying, and finally stop getting paid for flying.

Entry requirements: The pilot must hold a PPL(H) and have completed at least 155 hours of flight time, of which at least 50 hours as PIC, including at least 10 hours of navigational flight time.

Course of training: you have already completed the theoretical ATPL(H) or CPL(H) training, so only the practical training applies to you. Here you will deepen the skills you have acquired so far. You will improve individual emergency procedures and piloting technique with additional skills. This course also includes night flying training, where you will learn to do in the dark what you can already do safely in the daylight. It includes both helicopter handling techniques training and navigation flight, and concludes with a short solo flight without an instructor on board.

Examinations: Before the CPL(H) skill test, the applicant shall be over 18 years of age and have completed a total of at least 185 hours of flight time and comply with a number of other criteria. However, you have already confidently met all of these criteria in the previous 5 steps. A solid flight school will make sure about this. In the skill test, you will demonstrate to the examiner that you are proficient in safe helicopter handling, that you can safely complete the specified flight, that you have acquired what is known as "airmanship", i.e. aeronautical skill, good aeronautical judgement and thinking, and that you can make full use of the theoretical knowledge you have acquired.



## 7. Another flight hours (time building) - now as a professional and usually as a flight instructor FI

Even if you are already a professional pilot, have completed a number of training modules and exams, have flown a significant number of hours, feel confident in the cockpit of a helicopter and can already fly for a living, unfortunately this is still not enough to apply for a job as a HEMS pilot. Now you have the most time-consuming part of the journey ahead of you. You have approximately 200 hours of flying time, about half of which is as a PIC. To become a HEMS helicopter captain, you must have at least 1,000 hours as PIC. There are not many opportunities to fly this amount of hours in the Czech Republic, mainly helicopter ferry flights to maintenance centers, familiarization flights for those interested in training, and in the case of many pilots mainly the job of flight instructor (FI). **With 220 hours of flight time, many future HEMS pilots start FI training so that they can then complete the necessary flight time to enter HEMS while training other pilots. It is highly advisable to do all of your training to date at a large flight school that will begin to prepare you for the instructor position at the right time, will know you so that you have a high chance of being subsequently accepted as an instructor, and will also have enough students to grow your flight hours effectively.**

## 8. Go through a selection process with the company that operates HEMS

Now you are just one step closer to your goal. The years of study and training are behind you, you have passed all the necessary training modules and assessments. It hasn't been easy, but you have succeeded and you have

done it. You hold a CPL(H) commercial pilot license. You have sufficient flight hours and experience as a PIC and all the qualifications for the challenging position of a HEMS pilot. Now all that's left to do is to succeed in the selection process with the HEMS operator. One warning here...there are flight schools that offer a "HEMS Pilot Training" product to attract students, even though the company does not operate, has never operated, and has no relevant experience with HEMS. Beware.

### **9. Type training for the specific helicopter you will be flying for your employer and operator training**

This is followed by a type rating training for a specific helicopter, during which you will get to know the helicopter in detail, learn its specifics and, above all, learn to fly it safely. Then finally comes the operator's training.

### **10. Acceptance into the HEMS**

At this moment, you are seated in the cabin of an emergency helicopter. Several months await you, flying alongside an experienced, long-time captain, learning the specifics of the job in real-life situations, learning to deal with human misfortune at the scene, to react correctly and quickly to takeoff calls, changes and improvisation that you will constantly need to deal with in HEMS operations. After these few months and gaining the necessary experience comes the skill test with an examiner, to whom you will need to demonstrate that you are capable of flying in such environment and performing the duties of a HEMS captain.



## And the price?

The cost of training may vary to some extent from school to school. Some schools often try to attract students with a seemingly lower price, but this often goes hand in hand with lower quality training, because what you save somewhere, the flight school has to save elsewhere. Unfortunately, some of the less solid schools also charge "unavoidable additional costs" that were not mentioned at the beginning and are not usually communicated to a student until the student asks why they are billed.

Generally speaking, the final price of the training **including PPL, flight hours for obtaining CPL, ATPL or CPL theory, practical CPL training and night including skill tests with an examiner** is around EUR 100,000 including VAT and all fees. Now you can already receive a salary for flying, but building the necessary hours is easier for those who also get an instructor rating and provide training to other pilots. The amount for training in a solid flight school does not need to be paid in advance, but gradually according to the hours flown. So, you don't need to have the full amount ready on the day you start training.



## The following lines may also be of interest to your family

We understand that your decision to become a pilot is often influenced by people close to you. Since most of our students are just over 20 years old, it's often their parents who form that close circle—frequently offering support with the financial side of training. We want to assure them as well that we take our responsibility extremely seriously—not only our individual responsibility to each student and their family, but also our broader responsibility to society. Flight safety is our absolute priority, and we act accordingly. A student who we are not absolutely certain has the necessary skills to fly solo simply will not fly solo—until they reach the required standard. If there's ever any doubt about whether a planned training flight is safe to conduct (for example due to weather), we will never expose students—or ourselves—to unnecessary risk. We'd rather regret missing a flight that could have happened than regret taking off in unsuitable conditions. And if a student is struggling over time, we communicate this openly and in good time. Our goal is to either help them reach the required level of skills and knowledge or, if needed, support them in rationally considering whether the path of flight training is truly right for them.

**Finally...**

HEMS pilot training is not cheap and it is not for everyone. However, if you want to become a professional HEMS pilot and you have the ability to finance the training, you will be dedicated, last but not least, patient, you will be rewarded with **an attractive and meaningful** job that will bring you a lot of good feelings from the work you do, the main purpose of which is to help and rescue people in situations that threaten their health and often their lives.