ELPET 2018-2019. Interview.

1. ***What is your occupant? What is your profession?***

I'm an air traffic controller. I work at the international airport and do a very interesting and important job. I deal with aircraft.

2. ***What operations do air traffic controllers provide?***

Air traffic controllers coordinate the movement of aircraft in the air and at the airports, prevent accidents, minimize delays; they keep radio and radar contact with aircraft, they instruct aircraft to climb or descend, provide information to aircraft about weather conditions, traffic and so on.

3. ***Are there any natural or constructed obstacles in the vicinity of your aerodrome?***

We have two rivers on both headings of the RW and a rather big trench not far from the end of the RW. Such a location may be the reason for fog, wind shear and a turbulence which may cause difficulties for arriving and departing aircraft. Besides one side of the RW is surrounded by trees and bushes. It' s a good place for birds and animals to live. As for constructed obstacles they are lighting posts in the airside of the airport, and a TV and Radio Towers in the vicinity. They are marked with red lights on their tops.

4. ***How is the traffic movement across the airfield controlled?***

All the movement including movement of traffic, different vehicles and people is controller from the Tower building. Any aircraft, vehicle, or person walking or working in these areas must have a clearance from ground control. Controllers monitor the situation using radars, computers or visual references (visually).

5. ***Why is it necessary to monitor the situation in the airfield constantly?***

It's necessary to prevent RW incursions, collisions between aircraft, vehicles or obstacles. Controllers must be sure that RW is always clear for landings and takeoffs. It's important to provide orderly flow of traffic and for safety reasons especially at nights or in poor visibility.

6. ***What service do you work for?***

I work for the ATC service.

7. ***Describe the structure of your ATC center.***

Our ATC center is located in the air side of the airport, it has an ATC service, and an engineering, tele-technicians and supporting staff working shifts and round the clock. The ATC service has all the necessary units and facilities to control international , domestic and overflying flights. Engineering staff provides/ensues proper operation of the systems. The Briefing office checks and processes flight plans. All the activities are organized and controlled by the authorities.

8. Could you describe your ATC staff, please?

There are 32 controllers working internationally. All controllers have special education and English language certificates with levels four and five. The controllers are divided into five shifts with a supervisor at the head. Also we have 4 controllers for domestic flights.

9. What other services does it coordinate its actions with?

It coordinates actions with the engineering, the meteorological, the navigation, the aerodrome and emergency services, also with the military and neighboring sectors.

10. Why is it necessary for controllers to work in cooperation with other services?

We work in close coordination with other services because the ATC service is only one of many which provide safety flights at the aerodrome. So we receive weather information from met-office and may recommend pilots a safe route. The aerodrome service clears , treats the RW and provides acceptable braking action, then we give clearance to land and so on.

11. Why is it necessary for the ATC service to operate day and night?

Our airport and ATC service operate round the clock. (Lots of) aircraft arrive at our airport and depart in the mornings, daytime and at nights. So safety must be provided all the time (always).

12. How does the ATC service provide flight safety?

The main/primary task of ATC is to prevent collisions, to organize and maintain safe and orderly flow of traffic, to provide pilots with all the necessary information and assistance. To achieve it air traffic controllers of different types (such as Area, Approach and Tower) direct aircraft on the ground and in the air (in the controlled airspace), give them different instructions. To control traffic they use different equipment and apply different procedures.

13. Could you explain the meaning of "flight safety"?

In my opinion flight safety is an ability to carry out (perform, make) a flight without threat to lives and health of people.

Aviation safety means that the risks related to aircraft or operations of aircraft and people's lives are reduced or controlled .

14. What units does the ATC include?

The ATC service includes Area (ACC), Approach (APP) and Tower units.

15. What types of controllers do you know?

I know the following types of controllers: Tower controllers, Approach (APP) controllers, Area (enroute/ACC) controllers and Local routes controllers.

16.How do job functions of a Tower and an Approach controller differ?

Approach controllers don't handle traffic on the ground and visually, they provide minimum separation in the vertical profile. Common function is providing safety.

17.What is special about the ATC unit you work in?

It's a Terminal area : we have a military base and an aircraft factory nearby. And the ATC service is affected by their activities.

18. What qualities are necessary to become a controller?

A future controller must/should be responsible, disciplined, attentive. He/she must have a good memory, communication skills, also he must be to be able to work in a team and to handle stress.

19 .Why do aviation careers have age limits?

Before reaching (under) the age of 18 a young person is still considered to be a minor/juvenile so he is not responsible for his actions yet. As for older persons, I think, it's not very easy for them to complete the training (program) for the job .

20. Why does the work of an air traffic controller suit you?

Really this job suits me perfectly. I love aviation, airplanes, I like to resolve different task, problems. Also I'm responsible and disciplined enough to do this job. I believe, it' a right job for me.

21. What are the best things about your job? What are advantages of your job?

There are a lot of good points about our job. Firstly it's very interesting, exciting and well/highly paid. Then we work shifts so we have a lot of free time between the shifts and much vacation time (long holidays). Also controllers are provided with paid sick leaves, resort treatment, health insurance, free aviation tickets to any destination. And finally they can retire early.

22. Why do you find your job interesting?

Well, I really find my job very interesting. It's interesting for me to communicate with pilots on the air (в эфире), to give them different instructions and control traffic. It's interesting to work in a team, solve different tasks and help pilots. I can say for sure that the job of an air traffic controller is one of the most interesting and exciting jobs in the world.

23. What are negative sides of your job?

As for disadvantages, they are: a lot of responsibility, strict professional and medical examinations, constant learning (learning all the time). Then due to constant shift work we miss holidays, birthdays and other events. Night shifts negatively affect our body clock. Besides my job is quite stressful because I'm responsible for flight safety both on the ground and in the air.

24. Why do many controllers think medical examination to be a disadvantage?

I think it's because any medical control takes a lot of our free (personal) time. We visit a lot of doctors, take different medical tests. Unfortunately if the results are not very good we can be restricted from job for some period of time (until we are well again) or even lose our job.

25. Why is good health included in the requirements for your job?

As controllers have a large responsibility for lives of other people they must meet strict medical requirements. They must always be in a good physical and mental condition while on duty/at work.

26. What are health requirements to become an air traffic controller?

Controllers must be fit/heathy, they must have excellent vision, including colour perception, good hearing and speaking skills. They shouldn't experience (suffer from) heart, blood pressure and other health problems.

27. What happens if a controller doesn't feel well before the shift?

In such a case the controller informs his supervisor and a doctor. The doctor restricts him from the job, sends him home or directs to the hospital until the controller is well again.

28. Is it useful to have regular medical examination?

ATCOs regularly/constantly undergo a pre-shift and a full medical examination. I think, it's good. Because if you have some medical problem and you get to know about it you may take timely measures to recover.

29. Do you think these requirements are too strict? Why do you think so?

Actually, controllers have a constant full medical examination . They also face pre-shift medical checks. The doctor checks their pulse, blood pressure and temperature. Occasionally/randomly they are tested for alcohol and drugs. Of course, it's not very pleasant and convenient for us, it takes much our free time, but personally I think it's necessary procedure for safety reasons (to do our job well).

30. What do your authorities to help you to keep fit for job?

Air traffic controllers have long holidays, about 60 days a year, they can receive resort treatment. During the shift controllers take regular breaks every two hours and one additional hour for sleeping at night. After nights shifts we have 2 and 3 days off . Besides, at our control center we have good relaxation facilities, a gym, for example.

31. Describe your working experience/ your career in aviation.

I started working as a controller of the third class with one/a single rating only. Now I am a multi-rated controller of the first class . I have every reason to be satisfied with my professional career. But any controller who has a higher education, good knowledge, skills and enough experience may become a supervisor. Or to lead (to be at the head of) the ATC service later on.

32. What are your expectations in your career?

I have 17 years' experience of work as a controller. (I have working as a controller for 20 years/since 2003). I have all the ratings, the first class. I think, I have already reached maximum in my professional career.

I'm a young controller, I'd like to receive all the ATC ratings and the first class in the nearest future. And probably the position of a supervisor someday.

33. Why did the profession of an air traffic controller attract you? Why did you became an air traffic controller? What motivated you to chose the career of an air traffic controller?

a)As far as remember, it happened by chance. My friend wanted to be a controller, (it was my friend's idea) I just joined him. b) My father is a pilot. As he is crazy about aviation he wanted me to be an ATCO . I followed his advice so I am an ATCO at the moment.

34. Do you think you made right decision at that time?

I think yes. Now I like my job very much, and I have every reason to be satisfied with it. This job suits me perfectly.

35. What did you do to become a controller? What education did you get to become an air traffic controller? How did you get your ATC license? What did you have to do to get your ATC license? How did your career in aviation start? Why did you choose ATC as a career? What training is required to become an air traffic controller? How did you get your first rating? What did your on-the-job training involve?

After school I entered the Riga aviation college and finished it in 2003. (I entered the St-Petersburg university of civil aviation and graduated from it in 2005.) It took me three years to get my diploma of special secondary education. (It took me 5 years to receive my diploma of higher education. Then I had initial on-the-job training for the Tower unit. During this course I studied various/different disciplines like ATC standard operating procedures, aerodynamics, aircraft performance, air navigation, meteorology, the use of equipment at work. Also I had to undergo simulator training. Initially I trained normal situations and procedures, later emergency cases. Finally, I passed successfully an exam and obtained my ATC license, my first ATC rating and authority to act as an air traffic controller.

36. What knowledge did you obtain at the college/ university?

At the college I studied meteorology, aerodynamics, aircraft performance, air navigation, English, aircraft structure, maps and charts, ATC standard operating and emergency procedures, rules and regulations.

37. What was the most difficult for you when you were a student?

Probably, it was a simulator training. It was my first experience, I have never had such an activity earlier. It was really difficult to cope with the tasks initially.

38. Does the knowledge you obtained at the college help you now?

Of course, it does. In my opinion, I received good , basic knowledge on many disciplines such as air navigation and navigation aids, rules and regulations. So I may use it in my work now.

39. What was the role of your first on-the-job instructor in your career?

My first instructor was a very experienced and skillful person. He helped me to understand procedures, rules, how to use phraseology correctly and how to manage emergency situations. I got a lot of knowledge from him. Later I could successfully use it in my job.

40. What details does your ATC license contain?

My ATC license contains personal data: surmane and name, date of birth, also my ratings, my class, availability of the English language certificate and ATC license validity.

41. How long is an ATC license valid?

My license is valid for (a period of) three years.

42. How is the ATC license prolonged? What is the standard procedure of a license prolongation?

To prolong his license the controller has to undergo certain hours of on-the-job and simulator trainings. He should learn documents, procedures and pass successfully an examination. An experienced controller should prolong the license every three years, the younger ones every year.

43. Are you satisfied with your working conditions? Why/Why not?

I'm fully satisfied with my working conditions. We work in a large, well-lighted and well-ventilated operation room. We have comfortable arm chairs, air conditioning system, use modern and reliable equipment. Also we have good relaxation facilities, special places to have meals. Everything is good for me.

44. How has your working environment changed since you started your career?

It greatly changed for better. Now we have better equipment, better general conditions, I mean a high salary, long holidays, company benefits, medical insurance and so on.

45. What does your management do to make your working conditions comfortable? What facilities do you have for rest?

Our bosses replace old equipment for modern one. They provide us with all the necessary relaxation facilities. For example we have two separate/segregated relax rooms for male and female controllers. There we have comfortable sofas, TV sets, coffee machines and so on. Also there is a gym in our control center where we can do physical activities. It's good for our health.

46. What changes would you like to introduce?

May be to introduce Euro-control standards in ATC. Unfortunately sometimes we face difficulties handling foreign flights due to differences in rules procedures.

47. Do you prefer to work night or day shifts? Why?

As for me, I like night shifts. After the night shifts I have several (two or three) days off. So I have a lot of free time which I can spend with my family. I can relax properly. Besides at nights we have less traffic. It's also a good moment.

48. Does your workload differ in the daytime and nighttime?

Yes, in the daytime we have high traffic intensity. Night shifts are quite enough.

49. What problems may you experience due to high workload?

Due to high workload controllers may experience communication problems, time shortage for solving the problems, fatigue, stress, nervousness, great pressure and even health problems like increase of pulse or blood pressure and etc.

In such situations controllers may experience lack of time, stress, work under pressure, increased coordination and communication with pilots and airport (appropriate) services.

50. Is it difficult to remain concentrated all the shift?

Personally for me, it's not difficult. I'm trained enough to be concentrated while on duty.

51. What helps you to remain attentive during night shifts?

First of all, before night shifts I have a good rest. Also during the shift we have regular breaks every two hours and an additional hour for sleeping at nights. Besides I have a long experience and I am used to such a schedule. It's not a problem for me.

52. How is the work of the shift controlled?

The work of the shift is controlled by the supervisor. The supervisor is the head/the main person of the shift and he is responsible for all controllers in his team. The supervisor conducts briefings and de-briefings with his collegues. He assigns/distributes controllers to particular working places, defines a break time for them, monitors and assesses their actions all the time. He supports/assists controllers in difficult and emergency situations. In general he is responsible for good work and good atmosphere in the shift.

53. What are the sources for controllers to obtain flight data to control traffic?

We receive necessary information from flight plans, flight labels on the radar screen, briefing office, neighboring controllers and from pilots too.

54. What action do you take in case of some errors in an aircraft flight plan?

I immediately inform my supervisor, the briefing officer, the pilot and wait until the problem is solved.

55. Do you always have full information about traffic entering your zone?

Yes, if it's a legal/authorized flight , as a rule, I have full information about it.

56. When may an aircraft enter the airspace without a clearance?

Such a situation may happen only due to an emergency, in a life threatening case. If an aircraft enters the airspace without a special permission it can be intercepted by fighters because any infringement causes aviation hazard.

57. What data is displayed (what do you observe)on civilian radar screens?

On our radar screen we can see flight labels of each aircraft which include all the necessary flight data such as the call-sign of the aircraft, speed, the squawk, a cruising FL, reporting points, the destination, alternates and other data. Also it displays airways, SIDs and STARs, restricted and prohibited areas, potential conflicting situations and meteo information too. Flight and weather situation of neighboring sectors is also available on my radar screen.

58. What does a controller do if he is unable to identify the aircraft?

The controller can ask the pilot to transmit for identification and report heading and FL. Also he gives instructions to turn right or left, fly certain heading. If the aircraft is still not identified the controller will instruct the pilot to resume or continue own navigation.

59. How will a controller act if the radar screen goes blank? What will you do in case of radar failure? What do you have to do if you lose information on your radar screen?

In such a situation I immediately inform my supervisor, adjacent units. I provide double separation between aircraft to avoid any emergency. Also I may request some information from pilots (PiReps), neighboring sectors or use flight plan data.

60. What non-standard situations may happen in your area?

Any situation may happen, like flight plan problems, delays, traffic congestion, wildlife hazard, marginal weather conditions, miscommunication, parking problems and what not.

61. Do you handle non-standard situations by yourself or have you to coordinate with adjacent controllers?

We work in a team, so we coordinate all our actions with each other. But it's up to me to make final decision in all non-standard situations.

62. Why are non-standard situations analyzed at de-briefings?

We always analyze non-standard situations at de-briefings. We discuss what happened during the shift, we speak about mistakes. So controllers will be able to solve such cases correctly and properly in the future/next time.

We always analyze our activities in situations with high levels of traffic, bad weather, or emergencies at the debriefing, we find out and understand our mistakes, we become trained to deal with these types of situations better in the future.

63. What kind of restrictions may affect ATC operations in your zone? What temporary restrictions may you have in your zone?

In our zone we have constant and temporary restrictions. As for constant restrictions, they are over reserve parks and the nuclear power station. Temporary restrictions in our area are imposed/introduced due to military activities, VIP or other special flights. Also we may have restrictions in bad/adverse weather conditions.

64. How can your workload change in such cases? How do restrictions influence routine ATC operations?

In case of restrictions we need to use less number of FLs, SIDs and STARs. We may delay civil aircraft, direct them to holding areas. So it brings to traffic and frequency congestion. To deal with such a situation we have more communication and coordination with pilots, neighboring sectors and other different services. So our workload increases, we work with great pressure.

65. Do pilots experience difficulties due to some restrictions while flying in your area?

In case of VIP flights and military activities pilots can/may experience some/different problems, for instance/example: rerouting, limited number of FLs, delays, unavailable shortcuts. Also marginal weather phenomena can create (cause) difficulties for flying.

66. Which sector is the most congested/the most difficult for controlling?

I think, the most congested/the most difficult is the Ground sector. We always have a lot of activities with the aircraft, including push back, towing, de-icing, refueling and so on. Besides many vehicles move across the airfield or different aerodrome services/the ground staff may be busy with construction or other work.

67. Which period is the busiest one for your unit? Which is the busiest period for your sector?

It depends on the time of the day and the season. Traffic intensity is the highest in the morning. So we have peak hours and handle about ??? flights during the shift. Then traffic becomes less and especially it's quite at nights. In summer time when a lot of people use airplanes to reach their holiday destinations we also have a busy traffic.

68. How do you manage traffic congestion in your sector?

To deal with traffic congestion I apply different procedures like vectoring, sequencing, speed control procedure, shortcut, direct to (direct routing), short final. If the situation is critical I my direct aircraft to alternates.

69. What do controllers do if they observe a potential conflict situation?

If it happens in the air I immediately inform pilots of a conflict and give instructions, for example to change FL, heading, to orbit, to reduce or increase speed and so on. But if a pilot declares RA I don't interfere with pilots' actions, I just acknowledge (I reply "Roger") and wait when the crew reports clear of conflict. If I observe conflict situation on the ground I instruct pilots to stop taxi or to hold position.

70. What instructions do you give to pilots?

I give instructions to start up, to taxi, for takeoff and landing, to climb or descend and so on. These are different instructions depending on the stage of flight and flight conditions.

In my activities I give (issue) following instructions: to climb, descend and maintain FL, to reduce or increase speed, to fly certain heading and proceed to necessary point or holding area.

71. What instructions should be read back by pilots?

These are instructions for line up, takeoff and landing. Also all the clearances related to active RW number, heading, QNH, FLs, speed, route and entry clearances also.

72. How to avoid readback errors?

To avoid readback both controllers and pilots must strictly keep of RTF communication rules. I mean: to listen attentively , to use standard phraseology in all routine situations. Also when controllers (need to) switch to a plain English they should speak clearly and distinctly.

73. Why may pilots request level change? When pilots may report you that they are unable to comply with ATC instructions? In what cases may pilots disregard controllers instructions? What are your actions in such situations?

First of all due to TCAS resolution. Other reasons are: fuel management, aircraft performance; then in case of a sudden emergency and also to avoid dangerous/marginal/adverse weather phenomena.

74. What do you do in such situations?

In such cases first of all the controller clarifies the reason , after that he acts according to the situation.

75. What procedures do you apply when pilots request avoiding action?

As a rule pilots avoid weather at own discretion, but sometimes we use vectoring, level change, parallel offset and rerouting.

76. What are the reasons for aircraft to stop during taxi?

Aircraft may stop taxing due to poor surface conditions, obstacles on route and due to different technical problems with the aircraft (steering, braking, engine problems).

77. Do you have any equipment that warns you of a developing unsafe situation? How does your equipment warn you about an unsafe satiation?

Modern **ATM (air traffic management) systems** also include safety nets, which warn controllers of any potential danger. Examples of ground-based safety nets are: Short Term Conflict Alert (STCA), Area Proximity Warning (APW), Approach Path Monitor (APM) and Minimum Safe Altitude Warning (MSAW).

In our hi-tech computer we also have a warning system. In case of any conflict the color of flight labels on the screen change from white to yellow and red and we hear a voice alarm/sound alarm

78. Is the equipment in your workplace reliable? Why do you think so?

I think, our equipment is reliable. Nowadays we use hi-tech computer and satellite technology. They are regularly checked and maintained. Besides all our systems duplicated to prevent any stop in communication and controlling aircraft.

79. Are you satisfied with the equipment you use at work? Why? Why not?

Yes, I'm fully satisfied with the equipment, especially with hi-tech computers. They are sophisticated, provide us with all the necessary flight and weather data. So I can control all aircraft in my area also to have flight situation in neighboring sectors. It makes my work easier.

80. How has the equipment changed since you started your career?

Our equipment has greatly since that time. It has changed for better, I'd say. Now in daily activities we use complex and sophisticated equipment with up-to-date software. Computers in our control center contain all safety data concerning airspace, routes, weather, airfields, runway lengths and widths. Controllers make decisions based on the data provided by the IT. Nowadays analysis of air traffic situation and ATC procedures are fully automated. So our work became easier thanks to new technologies.

81. Do you think that computers will ever replace controllers? Why/Why not?

It's not easy to answer this question. Of course, in recent years equipment has become better. Flight information is more accurate now, it helps controllers to provide safety more effectively. But on the hand, computers are not smart enough to resolve non-standard problems and emergencies. Only controllers are able to do it. Besides only people can control the sophisticated equipment. So, I don't think that controllers will be replaced by computers in the nearest future.

82. How are standard ATC operations in your sector influenced by the weather? Does adverse weather increase controllers' workload?

Due to poor weather conditions we may apply vectoring, holding and low visibility procedures. Also we may direct aircraft to alternates. Departing aircraft will be delayed, it can lead to traffic congestion. So we must always monitor and provide the necessary separation between aircraft to avoid dangerous situations. Our workload increases, because we have more communication and coordination activities.

83. What type of hazard weather may make your work more difficult?

In spring and summer we often deal with thunderstorm activities, wind shear, turbulence and heavy showers/precipitations. In autumn difficulties may be caused by fog and mist. Also we may have a lot of additional activity due to heavy snowfalls.

84. How do you control flights experiencing thunderstorm activity?

Usually the crew avoids thunderstorms by flying around (circumnavigating) the hazardous area or by changing the flight level. The ATC gives pilots details on the storm – location, height, movement speed and direction. Controllers also provide navigational assistance. It's up to the controller to choose the best avoiding route.

85. Why is radio communication an essential part of your job?

Air traffic controllers don't have direct face-to-face contact with pilots, they give instructions, receive replies and provide crews with any information using radio equipment/systems.

86. What information do you exchange with pilots?

We exchange (share) (обмениваемся) meteo and traffic information, flight and RW conditions, information of any hazard on or in the vicinity of the RW like (such as) birds and animals activity, laser attacks, disabled vehicles or other foreign objects and so on.

87. What are the rules of communication used both by pilots and controllers?

Firstly, both controllers and pilots should use ICAO standard phraseology in all situation for which they are specified. Then, they must listen to each other attentively, speak clearly, distinctly, unambiguously, with proper rate of speech. Also they shouldn't use slangs or jargons.

88. What difficulties with communication may you have? What problems may arise while communicating with traffic.

Communication difficulties may arise/happen due to language or technical problems with the equipment. For example due to poor English, bad pronunciation pilots and controllers may experience misunderstanding. As for technical problems they include different interference on the frequency: distortions (other people speaking, noise, whistles), loud feedback, background noise. Also it may be a stuck microphone and in the worst case one- or two- way loss of communication.

89. What are controller's actions if a pilot doesn't reply?

In such a case I call a pilot (him) several times (again and again). If it doesn't help I give a pilot instructions for some maneuvers to determine the nature of the problem. Also I can use an emergency frequency or involve other pilots for solving the problem.

90. What may happen if two pilots start transmitting simultaneously?

It's quite an unpleasant situation, messages may be garbled or blocked. We will experience readback errors. Pilots can follow instruction addressed to other ones. So it's a problem for a controller.

91. Can a controller predict and avoid such a situation and avoid it?

Such situation may occur in case of busy traffic. So to avoid them a controller should sequence the flight and contact with pilots in advance/beforehand.

92. Is it dangerous to use two languages on the same frequency?

I think, yes. Effective communication is only possible when all participants/speakers on the frequency hear and understand each other. They should know (be aware of) traffic situation. Any confusion and misunderstanding can present/cause a danger to humans' lives. I think, one frequency, one language is the best option.

93. What do you do in case of pilot's receiver failure?

In such a situation I immediately inform my supervisor, adjacent units. I apply double separation between affected and other aircraft in the vicinity, increase time separation. I try to establish communication with a pilot using an emergency frequency, neighboring sectors, other pilots. I should determine if it is one or two way loss of communication.

94. What procedures do you apply to determine the nature of a communication failure?

In accordance with the documents I give the pilot instruction for different maneuvers , such as to change heading, FL, to turn left or right. I observe this actions on my radar screen. If the pilots follow my instructions I understand that it is a one way if not a two way (full) loss of communication.

95. How do you deal with a one way communication loss?

In such a case I immediately inform my supervisor and neighboring sectors, separate the suffering aircraft from other traffic, applying double separation. Also I may ask the pilot to enter a new SSR code.

96. What procedures should you apply in case of two-way communication failure?

In case of total communication failure controllers should transmit blind on all the frequencies, use/involve other aircraft or neighboring sectors to relay the message to the suffering aircraft, to separate other aircraft from it and constantly monitor the emergency frequency 121,5.

97. What backup systems can help you in case of the main equipment failure?

All our equipment has it's back up (is duplicated by backups) . In case of any malfunction the technical staff or the device automatically changes to reserve systems. So we can continue the non-stop ATC service (we can control traffic non-stop).

98. Why are non-standard situations analyzed at de-briefings?

We always analyze non-standard situations at de-briefing. We discuss our actions, mistakes in order to be able to solve such cases correctly and properly in the future.

99. How are the incident de-briefing conducted?

The incident de-briefing is also conducted by a supervisor. He presents an overview and details of the incident. We file reports and try to answer the following questions: Who was involved? What happened? Where did it happen? Why did it happen? What did we learn?

100. How does a supervisor help controllers to deal with an emergency situation?

The supervisor alerts and arranges all the necessary emergency services and assistant for the suffering aircraft. He organizes a good team work. If needed he may replace a controller by another one.

101. What training do controllers get to deal with non-standard situations?

Mainly it's simulator training. Besides we have role plays during our briefings and constantly (regularly) refresh our knowledge.

102. What exercises does your instructor use for simulator training?

All exercises are connected with (related to) non-routine and emergency situations, for example (like): technical malfunction (equipment failure), fire on board, security issues, marginal weather conditions and so on.

103. Do controllers have a break after handling an emergency? How often do controllers have breaks during peak hours? In what cases can ATCOs have breaks more often than every two hours?

Frequency of breaks doesn't (Our breaks don't) depend on traffic intensity. According to the rules/regulation controllers have breaks every two hours, but a controller may take a break any time he needs, especially when he is under great pressure and stress.

104. Why do you have regular breaks during the shift?

It's in accordance with federal rules. Controllers can't work non-stop, they must have breaks every two hours.

105. Where do you spend your break time?

Usually I spend my break time in the relaxation/recreation room watching TV or listening to music. I have coffee, lunch. Sometimes I visit a gym. There we have very good facilities for physical activities.

106. What changes in your routine work if an incident occurs?

In case of any incident or non-routine situation our workload increases, because we will have more coordination and communication with pilots and different services. If a situation develops into an emergency controllers will need to apply emergency procedures. They may experience stress, fatigue, work under pressure.

107. How may stress during the shift influence your decision making?

Due to stress the controller may be slow with his reaction and decision making.

108. What can be done to reduce stress at work?

The controller should have a good rest at home and receive his breaks during the shift in time. The supervisor should create a comfortable atmosphere in the team.

109. How do you maintain your professional level?

First, we have regular refresher courses every three years both in ATC and English at the institute of air navigation. Besides courses we have seasonal simulator training and briefings with a role plain of difficult and emergency situations.

110. Why are regular refresher courses necessary for controllers? Are they effective? What knowledge is refreshed at your regular courses?

These courses are very important and necessary because everything changes very quickly in our job, for example: the airspace structure, procedures and rules, equipment. We need to learn everything again.

111. Does regular training make you a better controller?

I think, yes. Because constant learning and training helps to keep and improve professional skills. We have everchanging equipment and constant updates to rules and regulations.

112. How does your instructor arrange simulator training?

We have a simulator training twice a year, usually it's a seasonal training. Mainly we work out non-standard and emergency exercises. The task are given both in English and Russian.

113. In your opinion, what is the best way to organize simulator training for experienced controllers? Do you think there must be any difference between simulator training for experienced controllers and new comers?

I think, there shouldn't be any difference in simulator training for experienced and younger controllers. They should have the same number of training hours, they should do the same exercises. All these will help to maintain and improve professional/operational skills. May be only controllers who are not very quick at their progress should have additional hours for sim training.

114. What effect does regular simulator training procedure have on your work?

Of course, only positive. Usually controllers train non-standard, emergency situations and new procedures. Regular sim training prepares controllers for real-life activities. So, controllers will be able to cope with them easily and properly.

115. Does the simulator training develop your English skills?

During simulator training we do a lot of exercises in English. We describe different situations and problems, ask questions using plain language. So it helps us to enrich our vocabulary, to improve speaking, hearing skills and grammar.

116. What language skills should be developed?

In their job controllers will need communication, including hearing, comprehension/understanding and speaking skills. Also they should be able to speak fluently with proper/correct grammar.

117. How was learning English organized at the college.

At the college/university we had scheduled classes. We attended lectures and practical courses, learnt both RTF and general also aviation English.

118. How do you improve your English language skills? What do you do to maintain good English skills in a proper level?

We have regular language refresher courses every three years and intermediate ones at the control center. Then we attend English classes where we train both RTF and plain English. Also I watch different TV programs and movies or read newspapers and stories. While travelling I try to speak English.

119. How do your bosses/authorities organize/ arrange English language learning?

At our control center we have a classroom with all necessary materials and devices, including IT systems. We get extra pay for using English. Also our bosses organize regular and intermediate refresher courses, foreign business trips for learning English.

120. Would you like to have English refresher courses more often?

May be only in a English speaking country. I think, learning is more effective when you are among native speakers.

121. Could controllers do without standard phraseology if they knew plain English very well?

I think no, because pilots' levels of plain English may be different. As for standard phraseology it is well known and understandable for all pilots and controllers.

122. What do you think the main purpose of regular English language testing for air traffic controllers is?

Controllers pass English testing every 3 years with level 4 and every 6 years with level 5. It's a necessary procedure because controllers should prove their real knowledge. According to ICAO requirement controllers are not allowed to work if their certificate expires.

123. How did you prepare for this particular test?

Before the test I had some classes with the teacher. We revised grammar, discussed different aviation topics, listened to communications and made reports. And now we have an innovation, we can prepare for the test using video lessons.

124. How do you spend your long holiday?

I like to travel to different places both in our country and abroad. I spend a lot of time swimming and sunbathing, doing other physical activities. To improve my health (to be fit) I visit resorts. I try to keep healthy life style and have a good rest.

125. Why do controllers have so long holidays?

It's in accordance with the federal rules. Controllers receive additional days for their harmful/stressful working conditions. In long holidays controllers may visit resorts, sea sides and improve health. They are provided enough time to recharge for further successful work.

126. Why do controllers like travelling?

First of all it's very interesting. Each time you discover/find something new, go sightseeing in different places, countries; try (test, eat) local food, meet and communicate with people of different nationalities. It's also a good chance to make my (the) English better (to improve my English).

127. 8. Is travelling your hobby?

I can't say that it's my hobby. I just like travelling. I like to see new places, meet different people.

128. Is flying the safest way of travelling?

As I work in aviation industry I can prove/say that flying is the safest way of traveling. And it is (officially) recognized all over the world.

129. Why are some people afraid of flying?

Some people may be afraid of flying due to their personal health problems. Others may have information of aviation incidents and accidents and frightened by it.