APPROVED BY Riga Aeronautical Institute Vice-President:

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"Introductory Instruction on Labour Protection, Fire Safety, Electrical Safety, Work with a Computer and Provision of First Aid"

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1. General Matters

- 1. The Introductory Instruction on Labour Protection, Fire Safety, Electrical Safety, Work with a Computer and Provision of First Aid (hereinafter referred to as the instruction) lays down the procedure of organisation of an introductory briefing and other briefings in labour protection, fire safety, electrical safety, work with a computer and provision of first aid (hereinafter referred to as labour protection) and the content of the introductory briefings at the Riga Aeronautical Institute (hereinafter referred to as RAI).
- 2. Each RAI employee (regardless of education, service record and position) should be familiarised with this instruction, when establishing a legal employment relationship with RAI.

2. Procedure of Organisation of Briefings and Trainings

- 3. Briefing and training of employees of the institute in matters of labour protection shall be organised in accordance with regulatory enactments about training on labour protection matters, by providing an introductory briefing to employees and by briefing employees at workplace.
- 4. The <u>introductory briefing</u> shall be conducted by a labour protection specialist in labour safety and fire safety of the Technical Service approved by RAI order (hereinafter referred to as the labour protection specialist). During an introductory briefing the labour protection specialist:
- 4.1. familiarises the employee with the *Working Regulations of the Riga Aeronautical Institute*;
- 4.2. familiarises the employee with this instruction, including provides brief information on RAI and familiarises the employee with the main matters of organisation of labour protection according to the description in section 3 of this instruction.
- 5. The employee shall confirm participation in the introductory briefing and familiarisation with this instruction with his or her signature in the relevant registration document.
- 6. Briefing at workplace shall be carried out by the immediate work supervisor, familiarising the employee with the work to be performed and work safety instructions for the specific work or position, taking into account the duties related to the fulfilment of job duties (tasks) at the respective workplace. The employee shall confirm that the briefing has been received with his or her signature in the log of labour protection briefing at workplace, which is kept and stored by the person responsible for labour protection at the institute.
- 7. A repeated briefing at workplace shall be organised at least once a year, but in case of hazardous work at least once in 6 months.
- 8. Unscheduled briefing at workplace shall be organised:
- 8.1. if working conditions change;
- 8.2. if there has been an accident at work or occupational disease has been stated;
- 8.3. if work is interrupted for a period longer than 60 calendar days,
- 9. Targeted briefing at workplace shall be organised:
- 9.1. if an accident is liquidated;
- 9.2. if one-time work is performed, which is not related to the employee's main duties;
- 9.3. if one-time work is performed outside the RAI territory;
- 9.4. if pursuant to the approved list work is performed, the performance of which requires an order (permit).
- 10. An extraordinary briefing T workplace shall be organised:
- 10.1. if new regulatory enactments on labour protection enter into force;
- 10.2. if equipment at workplace is replaced;
- 10.3. if incompetence or a violation of regulatory enactments on labour protection is stated;
- 10.4. if there has been an accident at work.

3. Content of Introductory Briefing

3.1. Short information about RAI

- 11. The biography of the Riga Aeronautical Institute started in 1942 from the training group of the 47th Air Squadron, which was based in Frunze, capital of Kyrgyzstan. By the government order, in 1942 this squadron was renamed into the Aviation Radio Technical School. When the war has ended, in 1945 the school moved to Riga and was renamed into the Special Service Aviation School. On 03 March 1971 by order No.102 of the Minister for Civil Aviation of the USSR the Riga Civil Aviation Special Service School was renamed into Pilot the Riga Civil Aviation Technical School. On 01 November 1989, by order IV 1926-p of the Council of Ministers of the USSR, the Riga Civil Aviation Aeronautical High School was established on the basis of the Riga Civil Aviation Pilot Technical School. On 23 April 1992, on the basis of decision No. 146 of the Council of Ministers of the Republic of Latvia of 23 April 1992 the Riga Civil Aviation Aeronautical High School was reorganised into JSC Riga Aeronautical Institute, which is a successor in title of all the above mentioned education institutions.
- 12. The Riga Aeronautical Institute prepares specialists in the following training programmes: Departments of Economics and Engineering. The Department of Economics prepares the following specialists: International Transport Company Management, International Transport Logistics. The Engineering Department prepares specialists in the following areas: Air Transport Systems Management; Aircraft Technical Maintenance; Air Traffic Control; Electronic Equipment Maintenance.

3.2. Basic Matters in Organisation of Labour Protection

- 13. RAI has created a labour protection system with the aim to guarantee and improve safety of employees and health protection at work. The work environment shall be created and maintained in such a way to avoid or mitigate the impact of the work environment risk. Labour protection shall include internal monitoring of the work environment, evaluation of risk factors of the work environment and consulting with employees.
- 14. Labour safety at RAI shall ensure:
- 14.1. working conditions, which are not harmful for health and are safe for employees;
- 14.2. briefing and training of employees in labour protection, fire safety and electrical safety;
- 14.3. internal monitoring of the work environment and evaluation of risk factors of the work environment;
- 14.4. control of observation of requirements of instructions and other regulations;
- 14.5. investigation of accidents at work and taking necessary measures to eliminate reasons causing accidents;
- 14.6. mandatory medical checkup for employees doing jobs involving work environment factors harmful for health or works in special conditions (in accordance with regulatory enactments and internal regulations);
- 14.7. training of employees in accordance with the requirements of regulatory enactments, as well as performs other duties related to labour protection.

3.3. Duties, Rights and Responsibility of the Employee in the Area of Labour Protection

- 15. The employee shall have the following duties in the area of labour protection:
- 15.1. to take care of his/her safety and health, as well as safety and health of those persons, whom the work of the employee affects or may affect;
- 15.2. to observe the *Working Regulations of the Riga Aeronautical Institute*, labour protection instructions and other regulatory enactments, the measures listed in the evaluation of work environment risk factors;
- 15.3. to use working equipment, household chemicals, transport and other manufacturing aids in accordance with the documentation defined in regulatory enactments (manufacturer's instructions, safety data sheets of chemical substances and chemical products, etc.);
- 15.4. to use collective protective equipment, as well as personal protective equipment transferred to him/her in accordance with the documentation defined in regulatory enactments (manufacturer's instructions, safety data sheets of chemical substances and chemical products, etc.) and after their use place the protective equipment in the place intended for it;
- 15.5. to observe safety signs, as well as use the safety devices, with which work equipment and workplace are equipped, in accordance with the documentation defined in regulatory enactments (manufacturer's instructions, safety data sheets of chemical products, etc.) and to refrain from arbitrary activation, change or movement of respective safety devices;
- 15.6. to report to the management or to the labour protection specialist immediately any accident at work, as well as any work environment factors, which cause or may cause a risk to safety and health of persons, as well as shortcomings in the area of labour protection.
- 15.7. to participate in briefings and trainings organised by RAI in the area of labour protection;
- 15.8. to cooperate with the RAI management, the labour protection specialist and trusted persons in ensuring a safe work environment and working conditions not to create risks to safety and health of employees;
- 15.9. to attend mandatory medical checkup in accordance with Cabinet of Ministers Regulations No.219;
- 15.10. during working hours to concentrate on the work being performed, not to waste time on conversations, not to disturb others;
- 15.11. to observe personal hygiene, to keep the workplace in order and clean;
- 15.12. to use collective protective equipment, as well as use issued personal protective equipment using it carefully and according to operating instructions.
- 16. When performing job duties, the employee may refuse from performance of work due to labour protection, notifying his/her superiors or the labour protection specialist immediately, if:
- 16.1. the performance of the respective work causes or may cause a risk to safety and health of the employee or other persons and such a risk cannot be prevented in other ways;
- 16.2. the work equipment or the workplace being used is not equipped with necessary safety devices or necessary personal protective equipment has not been provided to the employee;
- 16.3. the performance of the respective work is related to the use of such equipment, which does not correspond to professional preparedness or the briefing or training in the area of labour protection provided to the employee;
- 16.4. warnings, orders or decisions of the State Labour Inspectorate on the organisation of labour protection at the respective workplace have not been observed.

3.4. General Safety Requirements in Premises and Territories

- 17. When moving in RAI premises and territories, as well as outside them, the employee is liable to take general caution to move attentively and carefully, taking into account the following conditions:
- 17.1. going along a row of standing vehicles, or moving in between closely standing vehicles, to be particularly cautious, because the vehicles may start moving, and it is possible to get injured as a result of knockdown or squeezing by a vehicle;
- 17.2. when moving across the territory, to pay attention to the condition of the road coating potholes, depressions, cambers, edges, as well as the condition of the road coating, when it is raining and (or) snowing. Depending on the intensity of artificial lighting and hours of darkness/daylight, uneven road sections may not be noticed, therefore it is possible to fall or stumble, as well as, depending on temperature fluctuations and intensity of precipitation, it is possible to slip and fall on slippery road surfaces;
- 17.3. in the premises, to pay attention to the surface of flooring, its condition. To take into account that wet tile or linoleum flooring may be particularly slippery, as well as in the premises with many employees, sand and dirt drifts form, which also create a slippery surface, therefore, it is possible to slip and fall;
- 17.4. when moving on stairs to be attentive and not to be in a hurry. Stairs may be wet after washing it is possible to slip and receive injuries of different severity when falling.
- 17.5. when moving along the building in winter, to beware of snow and icicles.
- 18. To follow all the installed safety, mandatory and prohibitive signs. Safety signs should be used to warn and orient the employees subject to a risk, and to correctly direct their actions in any risk situation (obliging, prohibiting, informing, etc.). The most frequent safety signs at workplaces and territories:



3.5. Work Environment Factors at Workplaces

- The most significant work environment factors at workplace are physical factors, injury risk factors, physical ergonomic risk factors, chemical risk factors and psychoemotional factors.
- 20. Physical risk factors and their impact on health are related to:
- 20.1. general ventilation system, its defects, not ensuring correct microclimate in the work environment;
- 20.2. draught or increased air velocity in the room;
- 20.3. insufficient lighting potential reduction of visual acuity, visual fatigue;
- 20.4. increased or reduced room and ambient temperature, if duties have to be performed outside sensation of discomfort, reduced working capacity, catching cold is possible.

- 21. Injury risk factors and their impact on health are related to:
- 21.1. use of incorrect work techniques and methods, replacement of tools and devices intended by the technology with inappropriate tools and objects;
- 21.2. high temperatures and gaseous emissions in case of fire;
- 21.3. traffic accidents possibility to get injuries of different types and different severity;
- 21.4. use of sharp objects hands can be injured;
- 21.5. obstacles, unevenness on the floor, unqualitative flooring, as well as littered surroundings it is possible to stumble and fall;
- 21.6. falling from height, when performing any repair works, replacing burned-out bulbs, cleaning windows, as well as performing other works on height;
- 21.7. aggression and attacks possibility to get injuries of different types and different severity.

22. Physical and ergonomic risk factors are related to:

- 22.1. eye strain, when working with a computer, and driving a vehicle;
- 22.2. local muscle strain sedentary work with a computer, long driving of a vehicle;
- 22.3. movement of heavy objects.
- 23. Chemical risk factors are related to:
- 23.1. oil, fuel, paint, varnish fumes, which may cause irritation of skin, irritation and inflammation of ocular and nasal mucosa;
- 23.2. dust, when performing cleaning of vehicles, premises and territories.
- 24. Psychoemotional factors and their impact on health are related to:
- 24.1. constant concentration, adoption of important decisions, holding attention, as well as driving a vehicle;
- 24.2. work in the evening or at night, on weekends and holidays may cause psychological discomfort, disturbance of the biological cycle;
- 24.3. attack, aggression may cause a psychological trauma.

3.6. Action in Case of Emergency at RAI

- 25. Accidents at work and their investigation:
- 25.1. An accident at work is an emergency, which has happened at workplace during one working day or shift, after which the person has health disorders;
- 25.2. The victim and any witnesses of an accident at work should inform the management of the institute immediately by phone 67677831, the person on duty of the institute by phone 67629084 or the labour protection specialist.
- 25.3. Any accident shall be investigated °by an examination commission, which is created by an order to the organisation.
- 26. Having stated an emergency in the organisation extensive traffic accidents or traffic disturbance, any emergencies in engineering utilities cable networks, contact networks and power grids, technical emergencies, fire, unrest in the buildings of the territory of the institute, which endanger or may endanger safety of the institute, its employees and stability of economic operations, the management of the institute, security guards and help services should be informed.

27. Action depending on the specific situation and conditions:

- 27.1. in case of fire:
- 27.1.1. to warn other persons working in the building by pressing the closest alarm button, if fire alarm is not in operation;
- 27.1.2. to inform management, the technical service and the person of duty of the institute, to call the State Fire and Rescue Service by phone 112.

- 27.1.3. to do everything possible to liquidate fire, using the fire using fire extinguishing media available in the building;
- 27.1.4. to leave dangerous areas (premises) as soon as possible, if the flames/fire cannot be extinguished using own efforts.
 - 27.2. in case of electric current leakage, power outages:
 - 27.2.1. to stop working an inform the immediate superior about dangerous situations;
 - 27.2.2. to switch off electrified tools, equipment;
 - 27.2.3. to disconnect current leads from the contact / switch;
 - 27.2.4. to inform the management or the Technical Director, security guards or the employee responsible for maintenance of electrical equipment of the institute.
 - 27.3. in case of an accident at work (injury, poisoning):
 - 27.3.1. to provide first aid to the victim (having previously evaluate own abilities and skills in the provision of aid);
 - 27.3.2. to call an ambulance, if the victim is unconscious, is unable to move, is suffocating, bleeding, received an electric trauma, complains about severe pain, has probably broken bones. An ambulance (phone 113 or 112) shall be called as soon as possible without delaying or stopping provision of help;
 - 27.3.3. inform the management of the institute about any emergency.

3.7. General Electrical Safety Requirements

- 28. Electrical safety is a set of technical means and organisational measures, which ensure protection of employees from harmful and dangerous effects of electric current, electric arc, electromagnetic field and static electricity.
- 29. Only employees, who are trained to use equipment and know safety requirements may be involved in works with electrical equipment.
- 30. When operating electrical equipment, employees (with the exception of the electric equipment maintenance staff) are prohibited to:
- 30.1. to do any repairs to electrical equipment;
- 30.2. to open electric distribution cabinets, control switches, etc., as well as to perform any works in the direct vicinity of uninsulated wires and open parts of electrical equipment;
- 30.3. to touch uninsulated electric wires, because they may be live;
- 30.4. to install and arbitrarily connect any improvised heating or lighting equipment;
- 30.5. to remove plugs from contacts by holding (pulling) the wire.
- 31. The following organisational and technical measures ensure safe operation of electrical equipment:
- 31.1. briefings and trainings have been conducted;
- 31.2. correct assembly and operation of equipment;
- 31.3. hygiene requirements are observed;
- 31.4. no external damages are visible;
- 31.5. insulation, grounding, resistance measurements have been made.
- 32. Having found damages to electrical equipment, the employee responsible for maintenance of electrical equipment should be informed immediately.

3.8. General Fire Safety Requirements

- 33. Fire safety requirements at RAI are determined by the *Fire Safety and Fire-Fighting Law*, the *Fire Safety Regulations*, the *Fire Safety Instruction*, *Plans of Civil Protection Measures*.
- 34. In case of fire, act in accordance with the *Fire Safety Instruction*, the plan of annunciation in case of emergency and other external and internal regulations.

- 35. The employee designated by an order shall be responsible for fire safety at the specific object.
- 36. In the area of fire safety it is the duty of any employee:
- 36.1. to observe the *Fire Safety Instruction* and other internal regulations;
- 36.2. to prevent any activities, which may cause fire;
- 36.3. to work only with such tools, appliances, devices and equipment, which have no defects, as well as to observe their operating instructions;
- 36.4. when ending work, to clean up the workplace and to disconnect current loads, with the exception of devices, operating instructions of which permit this;
- 36.5. to know how to use available fire-fighting tools and participate in fire safety trainings.
- 37. It is prohibited to smoke in the premises and the territory of the institute.

38. If the fire alarm has gone off:

- 38.1. to stop lectures immediately, all students and employees should go to the exit of the education institution in accordance with the floor evacuation plan;
- 38.2. during evacuation to take along personal belongings and documents;
- 38.3. after evacuation employees of the institute should inform the person on duty, which room the employees have left and whether any employee has stayed in the room;
- 38.4. students should be evacuated by the teacher, with whom they have a lesson;
- 38.5. evacuation of students living in a dormitory on working days shall take place together with the person responsible for the dormitory or the supervisor of the dormitory, but on weekends, holidays or outside working hours by the person on duty of the institute;
- 38.6. after evacuation all the students and employees gather at the main entrance of the institute (not closer than 5 m to the main entrance), where the teacher checks according to the course list whether all the students have left the building;
- 38.7. after evacuation of students the teacher should inform the person on duty, which room has been vacated and about the total number of students in the group;
- 38.8. if the check according to the list has revealed that some students or employees have not left the building, the person on duty of the building should be informed immediately;
- 38.9. employees and students are allowed to return to the building only when an employee of the technical service or the person on duty of the building has permitted to continue lessons;
- 38.10. on weekends, holidays and outside working hours the students living in a dormitory after evacuation should gather at the main entrance of the dormitory (not closer than 5 m to the main entrance) and are allowed to return to their rooms only when permitted by the person on duty of the institute;
- 38.11. in case of fire or an accident, when there has been evacuation from the building, employees and students should decide themselves on their further actions;
- 38.12. the Technical Director shall inform the management of the institute, why the fire alarm has gone off and measures taken to prevent damages.
- 39. The risk factors, to which employees and students of the institute may be subjected, are described in the annex to the instruction.

4. General Requirements to Work with a Computer

In recent years, the number of computer users and intensive use of computers has been growing not only at work, but also during free time. As a result, people are spending increasingly more time indoors and more often face the health problems promoted by work with a computer.

In order to prevent harm to own health, computer users should know basic principle of equipment of the workplace and organisation of work. These requirements in the Republic of Latvia are laid down in Cabinet of Ministers Regulations No.343 of 6 August 2002 "Labour Protection Requirements When Working with a Display" and Latvian standards LVS EN ISO 9241 "Ergonomic requirements for office work with visual display". The requirements of these documents have been taken as a basis, when preparing the instruction, which must be observed by all the computer user of Structural Units of the University of Latvia (operators of workstations).

A workstation is a workplace, on which there is a computer and devices ensuring its operation (base unit, display, software, keyboard, input device), which ensure the operator-machine interaction. A workstation may also be equipped with other accessories necessary for work, for example, a printer, a scanner, a modem, a floppy disc unit, a telephone, a fax machine, a document rack. A workstation also includes the part of the work space necessary for work with a display, a desk and a chair.

The requirements to labour protection defined in the instruction are applicable to computer users (operators of workstations), whose job duties include at least two hours of work with a display at a workstation every day.

Planning of the work process

The employer should inform the employee about all the risk factors and the possibilities to prevent or mitigate them at workplace. The work process should be planned in such a way that the nature of the work being performed changes, for example, it is recommended to change sedentary work to standing work or work requiring physical efforts after some time.

If such organisation of work is impossible (for example, intensive input of data, reading of data from the screen, etc.), it is necessary to have regular breaks, which should be included in working hours.

Type and time of breaks

It is not recommended to work with a computer without a break longer than 2 hours. Short, regular breaks are much more effective than long and irregular breaks. It is recommended to interrupt work for 5-10 minutes every hour or for 15 minutes every 2 hours. It is not recommended to stay near the monitor during breaks. If work is related to reading of data from the screen, then during breaks eye strain should be avoided. Furthermore, if work is related to intensive input of data, then during the break similar movements of hands and wrists should be avoided. Different exercises are recommended during breaks.

General requirements to a workplace

If several employees work with a computer in a workplace, then there should be a possibility to adapt it to each employee individually. The workplace should be sufficiently spacious for the employee to be able to work conveniently and change the working posture easily. The recommended working space per employee is at least 4.8m². When equipping a workplace, attention should be paid to the painting of room walls, work surfaces and equipment. It is recommended to choose light matt pain, because it does not leave reflections on the screen.

The heat released by equipment at workplace may cause discomfort in computer users.

Recommended air temperature in the working room: $22^{\circ}C \pm 2^{\circ}$ in cold weather, $24.5^{\circ}C \pm 1.5^{\circ}$ in hot weather. Recommended relative air humidity: from 40 to 60%.

If more than one computer is located in the room, it is recommended:

to place displays with their rear panels facing each other;

The distance from the rear panel of one display to the screen of the other display should be more than 2.0 m;

The distance between side surfaces of adjacent displays should be more than 1.2 m.

5. General Requirements and Action in the Place of an Accident

- 1.1. **First aid** the aid to the victim (sick person) in a condition critical for life or health provided, to the extent of their knowledge and possibilities, by persons qualified or not qualified in medicine, regardless of the level of preparedness and equipment.
- 1.2. In order to provide first aid correctly and save the victim, the rescuer (provider of help) should keep calm and evaluate the situation, including existing and threatening dangers, act quickly, boldly and in a targeted way, not to be afraid of error, but also not to disturb the victim, as well as take care of oneself.
- 1.3. The provider of first aid provides only first aid to maintain processes viable for life rather than treats!
- 1.4. Duties of a provider of first aid:
 - 1.4.1. to save the victim from a dangerous area (for example, there is a threat of fire or explosion), however, not to touch the victim and take his or her outside from the area of effect of dangerous electricity, unless current has been disconnected!
 - 1.4.2. to eliminate the source of danger by disconnecting gas, disabling the unit, disconnecting power supply, disabling the engine, extinguishing flames, etc.;
 - 1.4.3. to evaluate whether the situation is safe (Are there any other threats? Is the environment safe? Is anyone else's life in danger? Can anyone being present help? Is it necessary to call special help services?) and call relevant help or instruct some other person, who is present, to call for help (**113 or 112**);
 - 1.4.4. to save other people located at the place of the accident from potential threat;
 - 1.4.5. to clarify to the extent possible the nature of the victim's injury or disease;
 - 1.4.6. to provide relevant help to the victim, mainly handling the most serious health disorders/injuries;
 - 1.4.7. to take care of the delivery of the victim to a hospital or home, if necessary;
 - 1.4.8. if an ambulance is necessary and has been called, to stay with the victim until it arrives;
 - 1.4.9. when an ambulance has arrived, to tell its staff about own observations and first aid measures taken, and to help, if necessary;
 - 1.4.10. to save oneself and to prevent infection of oneself and the victim (use rubber gloves and other protective equipment from the first aid kit);
 - 1.4.11. to keep a conversation while you provide first aid, explain what you want to do to reduce his or her fear and know that the victim has not lost consciousness.
- 1.5. When calling for an ambulance or rescue service, inform its dispatcher:
 - 1.5.1. where this has happened,
 - 1.5.2. what has happened,
 - 1.5.3. how many victims or sick persons are there,
 - 1.5.4. what types of injuries are there,
 - 1.5.5. answer to all dispatcher's questions,
 - 1.5.6. not to stop conversation or cut the connection before the dispatcher does this.
- 1.6. Each accident should be reported to the immediate superior and the Labour Protection Specialist.

6. Concluding Matters

- 40. The employee, who has been familiarised with this instruction, is responsible for its observation.
- 41. For any failure to observe the requirements of this instruction employees may be called to disciplinary responsibility or other responsibility in accordance with the procedure laid down in regulatory enactments of the Republic of Latvia.
- 42. This instruction shall be updated by the Labour Protection and Fire Safety Specialist.

Developed by: LP Specialist:

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