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STRATEGIC AND ORGANIZATIONAL ANALYSIS OF AIRCRAFT TYPE RATING AUTHORIZATION TO MANAGING RESOURCE DEPENDENCY RISK

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ABSTRACT

Organizations needs to provide resources to maintain their activities and achieve their objectives. Organizations optimum manage risks of resource flow continuity when they create their own resources. Thus, the dependence of the organization on foreign sources is eliminated. Now the organization becomes a resource for third parties and so other organizations become dependent on this business. An organization that creates resources for stakeholders provides strategic advantages. Because when an organization moves to the position of producing resources for both itself and third parties, it gains strategic competitive advantage. This study on the strategic and organizational risk analysis of Eskisehir Technical University Aircraft Type Training authority within the context of resource dependence and core competence aims to make effective use of corporate resources, to develop personnel and thus to create corporate value. Eskisehir Technical University (ESTU) Faculty of Aeronautics and Astronautics has corporate strategy as improving core competence strengths institutionally. In this context ESTU Faculty of Aeronautics and Astronautics is qualified to provide type training including their flight training fleet which includes Beech 90 Series, Socata TB Series, Cessna / Reims-Cessna 172 / F172 Series aircraft types. In this study, both strategic and operational risk analysis of (ESTU) Aircraft Type Training Authority using in view of resource dependency risk. The results of risk analysis present that AMO type training authorization may provide advantages to organization via saving workload, and also required qualified personnel who are plays role both aircraft maintenance training and maintenance. Thanks to this authorization, all personnel, taking type training, have become the instructors and the chance to give this training to the third parties and thus they have gained competitive advantage by reaching the state that provides the source from the demanding source. Resource dependence risk has been managed both in terms of strategic, operational and institutional resources. The management of this risk makes it possible to create an environment that supports corporate sustainability. A strengthening business continuity was also provided in the institution. This research presents strategic and organizational risk analysis and also performance assessment to manage resource dependency via both seizing opportunities and supporting corporate sustainability. Due to the scope and authenticity of the work it is anticipated that it may contribute to both the literature and the aviation sector managers.

Keywords: Eskisehir Technical University (ESTU), aircraft type training authority, corporate sustainability, human resource management, resource dependence, strategic risk analysis, performance assessment, risk analysis, management and strategy.

INTRODUCTION

It is envisaged that the organizational culture developed by supporting the risk culture as basic ability can be transformed into a resource that can provide competitive differentiation through risk management practices at corporate level. Human resource strategies developed with corporate risk management support for competitive differentiation are vital. The main hypothesis in this study is that the strategies developed for resource dependency, outsourcing, risks caused from transaction cost on the basis of corporate risk management are predicted to have a competitive differentiation of an organization and a potential for providing reasonable assurance for corporate sustainability. Managing stakeholder risk has the potential to influence organizational risk strategies related to the resource dependency approach. The organization will be able to raise awareness strategies for its existing resources through effective and corporate risk management practices. Risk management is a necessary managerial approach and practices to increase resource awareness.

In the aviation sector, which has dynamic and variable characteristics in this study, the issue has been tried to be related to corporate risk management and related strategies, taking into account the uncertainty of sourcing as a risk. It is believed that the performance of structured corporate risk management will be closer to the desired level within the scope of the objectives to be achieved and in line with corporate strategy, personality and resources (Küçük Yılmaz, 2017).

There cannot be a complete rationality for organizations, organizations need resources, and dependencies arising from these needs create problems (Sözen & Basım, 2012). This theory, which embraces the open system approach, states that organizations inevitably engage with their environment including boundaries and uncertainties and that these relationships are one of the fundamental variables shaping the behaviour of organizations. Unlike other theories, resource dependency theory emphasizes the control of the organizations of the environment, focuses on the resources, power and dependency in the inter-organizational relations and combines the power with the quest to manage their environments.

Both the struggle to control the organization and the powerful individuals within the organization are influential on organizational strategy and behaviour, and the behaviour of organizations influences partially to the environment. Organizational behaviours result in financial outputs like profitability or customer focused outputs (Sözen & Basım, 2012). This work continues with the section discussing resource dependency. Then it continues with the section where benefits and opportunities are evaluated by risk analysis method.

RESOURCE DEPENDENCE

It is known that no organization is self-sufficient. It needs to be in exchange with the environment in order to survive. The degree of scarcity or importance of resources required by the operator determines the nature and extent of its dependence on the environment. Resource needs make organizations depend on their environment. In fact, what the organization is going to do determine the external environment (Koçel, 2015).

The resource dependency approach is an approach that considers the organization as an open system, and particularly focuses on interaction with its environment. In this context, the resources that organizations have to supply in order to produce goods and / or services are making them dependent on their environment and the management practices in this dependency direction have a direct influence on the institutional performance by determining the organizational structure. According to this approach, the accessibility and strategic importance of resources needed by the organization determines the level and quality of dependence on its environment. The importance of the inputs required and the difficulty of obtaining them is different for each organization. For example, some inputs for operation are less important or more accessible to these inputs, some of which have critical designation and can be difficult to provide. In this case, businesses generally prefer to take action by collaborating with their suppliers to reach the resources they need at any time.

The importance of the inputs required and the difficulty of obtaining them is different for each organization. For example, some inputs for organization are less important or can be easily accessed, whereas some of them have critical significance and can be obtained harder. In this case, organizations generally prefer to take action by cooperating with their suppliers in order to reach the resources they need at any time (Saruhan, 2012).

Organizations are engaged with each other because of reasons like reducing their production costs, developing and spreading new technologies, accessing new markets, accessing resources or share resources, sharing risks arising from an action that can not be taken by a single organization capacity, reaching the experience and knowledge of partners within the value chain and sharing the profit coming out from common production. These relationships can be in the form of joint ventures, establishing new companies in the enterprise, and establishing new companies with strategic partners. It can be an input that is considered critical for every organization. Organizations take a variety of measures for inputs that are critically important and can be obtained hard. Mergers and joint ventures, consortia, various legal agreements and strategic alliances, and joint board members have the highest priority at these measures. The Resource Dependence Approach is based on open system understanding. This approach focuses on the relationships between the structures and behaviours of organizations and the other organizations and their behaviours so that organizations can survive (Koçel, 2015: 353).

Organizations develop cooperation in a variety of ways with organizations in the external environment (which can be customer, supplier, competitor, etc.) in order to secure dependency on critical resource. This approach also has an opinion on the power balances within the organization. Accordingly, the personal and / or departmental power within the organization will be gathered in people or departments that may influence the arrival of critical resources from external environment to organization. According to this approach, organizations are active against their environment, not passive. They make decisions that affect their future.

From this theory, the risk analysis will be presented through the case study, which will strengthen the core capabilities in terms of resource saving for managers and qualified production planning.

Strategic and Organizational Risk Analysis of Aircraft Type Training Authorization for the Institution

The aviation sector has been growing with the stability provided, taken precautions and the liberalization policy since 2003 and this growth has made it an important factor in the economic development and wealth of our country (SHGM, 2015). At this point, with system approach, each sub-system of civil aviation has importance. The development and improvement made at the elements of the subsystem will support the system in a positive way and will enhance the potential to support success at system's goals. With the same approach, this study, which is focused on the Maintenance Unit and its technicians in aviation, supports the role of aviation sector by taking Type Training Authority and application of taken authority with high performance.

Within the Eskisehir Technical University (ESTU), flight schools, aircraft management, aircraft maintenance organization, aircraft maintenance training organization, airport, air traffic management unit, continuous airworthiness organization and all of its subunits are present and operated. This situation reduces the dependence of training and flight activities to the least, but it also brings the need for qualified human powers in order to ensure the continuity of operations. Eskisehir Technical University (ESTU) differs from other aviation organizations in Turkey by involving all sub-units which include many different elements in the aviation system. In this context, when considered with the system approach, each system in the main system produces output of the other system. The importance of Eskisehir Technical University (ESTU) reveals at both Turkey and the aviation sector since it produces its inputs and outputs by its own resources and has outstanding and distinctive quality.

The fact that the aviation operations have an integrated structure, many aviation operations are carried out at the same time in Eskisehir Technical University (ESTU), and a possible disruption in any part of the process can affect the entire operation; these increase the criticality, risk and importance of aircraft type training authority.

Each aircraft has its own unique design, characteristics and systems. The flight and maintenance crew, which will be engaged on aircrafts, must be subject to detailed type-specific training for each aircraft they will be authorized to carry out their duties. Trainings given to the maintenance team can be provided by the manufacturer or by organizations authorized by local aviation authorities.

For the aircraft maintenance technicians who work or will be working in the aircraft maintenance organization and the continuous airworthiness organization of Eskisehir Technical University (ESTU), this requirement has the advantage of being able to meet this authorization by the Faculty of Aeronautics and Astronautics.

The direct or indirect opportunities of involving aircraft type training within the organization are as follows:

- Increase in the number of aircraft maintenance approver technicians,
- Ensuring requested aircraft maintenance services can be performed in a shorter time,
- Equal distribution of workload in the aircraft maintenance organization,
- More efficient use of aircraft maintenance personnel (as approvers and support personnel)

- Reduction of possible delays caused by maintenance in pilot training flights,
- Increase in the number of qualified personnel to be employed in continuous airworthiness organization,
- Equal distribution of workload for maintenance plans and follow-up
- Minimizing the potential delays in maintenance planning and follow-up,
- More efficient use of public resources (no external type training),
- The absence of external dependence within the framework of aircraft maintenance trainings,
- More efficient use of the workforce (reduced training periods and introducing the new maintenance personnel to the system in a very short time)
- Ensuring that the knowledge accumulated in the aircraft maintenance organization is secured,
- Increase of appointment alternatives for the organization (between SHY-145 and SHY M) by increasing the number of qualified personnel.
- Providing the opportunity for the external aircraft maintenance staff or other related staffs to get training in Turkey
- The trainers tasked for SHY-147 basic training process can provide their update training needs within the organization.

RESULTS / FINDINGS

Risk Analysis Based on Aircraft Type: Socata TB-20 Series, Beechcraft C-90 Series and Cessna 172 Series

Within consideration of the difficulty of maintaining service in our country for aircrafts present in the aircraft fleet of the Faculty of Aviation and Astronautics, it is clear that the delays in the maintenance period will directly affect flight trainings. These delays pose risks in terms of both training and resource use. In this context, the type training authority of Eskisehir Technical University (ESTU) Maintenance Unit is crucial in terms of continuity of flight training and resource utilization.

Eskisehir Technical University (ESTU) has been in a position to provide qualified personnel to civil aviation as it provides critical benefits by eliminating external resource dependence and generating its own inputs in such an important issue, as well as managing flight safety risks and providing resources to other organizations. The study contributes in a way to provide reasonable assurance that this resource will optimize the process of transitioning to the position.

The project, on which this study is based, has enabled to implement the authorization as soon as possible whereas efforts had been taken for so long years to get it. The study has yet allowed positive opportunities in the first month. As a proud evidence for the surplus value of the work, dependence of Turkish Economy and Turkish Civil Aviation to external resources has been eliminated by creating a resource that wasn't present in our country. While the costs are reduced, opportunity of providing type training has been considerable as a benefit.

The Approach of the organizational risk management, constitutes the main mentality of the study. In the way of supporting the organizational purposes and optimum use of the resources, is one of the fundamental principles of risk management that forms the base of the research problem of the study. In addition, increasing the quality of the process and contributing to corporate sustainability by this risk management approach is the leading goal of this study.

Technicians must complete type training in order to be able to maintain the aircrafts in aircraft maintenance institutions in the aviation sector. Relevant type trainings are provided by aircraft type training institutions authorized by national / international aviation authorities. Due to the difficulty and time-consuming process of obtaining this authorization, maintenance organizations are leaded to provide type training from a different organization and thus they have both financial and labor losses. Identification of non-value-added, ineffective and cumbersome steps and applications as risk, is also considered as potential benefit of the study.

Beechcraft 90 series C-90 B2 Type Trainings, which are completed, are especially important in terms of the risk they have, and the opportunities they bring. In terms of resource dependence and sustainability, the basic authorities being not given to many individuals, avoiding work interruption with the organizational approach and working alternatively at aerospace mentality, completing all type trainings and C90 B2 type trainings, represents the achievement of one of the key objectives of the study.

When subject SHY-145 is evaluated in terms of Maintenance Organization Performance, the maintenance done by the maintenance unit, the number of man-hour produced and flight training department's flights are remarkably increasing every year. This increasing operational acceleration and flight numbers have become an opportunity, not a threat, with increasing maintenance capacity within the scope of the study. Because, one of the objectives of the study is to improve both the performance, the quality and the productivity of the unit capacity by increasing the number of type authorized approver personnel. Therefore this goal has already been nearly achieved.

For example, although the number of work orders increased in 2016 compared to 2015, the existing staff proportionately completed more work in less time, when the increase in flight hours produced are considered. This is a strong indication that there is an increase at efficiency and productivity in the maintenance unit. One of the objectives of the study is to support the efficiency and productivity with qualified personnel. In addition, the study has leaded to save money on training organizations and tuition fees for university personnel. Thus, Eskisehir Technical University (ESTU) has obtained the advantage to create qualified human resources on its own and even provide type training to external organizations. This has strategic importance in terms of managing the risk of resource dependence. Additionally, the University has achieved a position and competitive edge in raising qualified technicians who are most needed and identified as one of the weakest aspects of aviation. Moreover, university resources will also be able to be used to increase and improve the capacity of the maintenance unit.

Type trainings to be provided by outsourced institutions are usually organized either when the number of applicants is sufficient or when there are group applications. Assuming this is the case, the organization will have to send its staff to this training only once. For example, for C90 Type Training, if 10 technicians (5 Avionics and 5 Mechanics) are considered, these 10 personnels will not be able to work at the same time at least 35 working days.

In man-hour plans, 35 working days is considered at 7 weeks / 49 days. On a man-hour plan, one person is considered to have a work time of 6 hours per day. The provision of 10 technicians for at least 49 days not being able to serve in the maintenance unit during the same period would mean a loss of at least 2940 man-hours for that period (Table 1).

Table 1. Example Table for Beechcraft C-90GTI Type Training Man/Hour Gain

Number of Technicians Attending Training	Training Time	Working Hours	Total Gain
10	35 work days +14 days weekend = 49 days	6	10 technicians x 49 days x 6 hours = 2940 Man/hour

Every three months, annual man-hour plans' deviation situation is reported to **DGCA** (Directorate General of Civil Aviation). If this deviation is more than 25%, the issue of using the authority of the organization is critical. For example, in the 2016 man-hour plan, a total of about 20,000 man-hour is foreseen. When we consider four periods of three months (120 days), one period will mean 5,000 man-hour. In case there is a decrease of 2940 man-hour, the deviation is more than 2 times greater than the maximum 25%. This means that half of the expected is produced during that period. The authority status of the maintenance organization will be re-audited by the authority, as both man-hour loss at that time and man-hour condition to be produced in the following periods will exceed the deviation limit of DGCA which is 25%.

FLEET ANALYSIS: BENEFIT-COST ANALYSIS OF AIRCRAFT TYPES TRAINING PERIODS AND TRAINING FEES

Socata TB-20

An offer from Stephen HILL, who is an instructor in the AAT technical training organization, couldn't be received, because there has been no identified EASA Part-147 or SHY-147 approved aeronautical maintenance training organization giving Socata TB-20 training in any country.

Based on this information, Eskisehir Technical University (ESTU) has obtained the sole authority status about Socata TB-20 Series type training. This has added a pre-eminence to the University's importance at Aviation

scope. In addition, the increase in the number of type training and certified personnel of the maintenance unit has created the potential to increase the number of aircraft allocated for flight training. This, on the other hand, is also important as one of the opportunity risks that allows the University to increase its quota for flight training, while also creating an advantage with the opportunity to provide type training for third parties. A new field has been added to the fields of the Sector-University cooperation, which means that the "Development" side of the Work is embodied.

Beechcraft C-90GTI

(The offer was taken from Glennair Training Center Limited Company through Stephen HILL who serves as an instructor in AAT technical training organization).

Table 2. Course Hours and Fees for Beechcraft C-90GTI Type Training

Theoretical Training		Practical Training	
B1 Mechanic	5 days = 30 hours	B1 Mechanic	8 days = 48 hours
B2 Electrical / Electronic (Avionics)	5 days = 30 hours	B2 Electrical / Electronic (Avionics)	10 days = 60 hours
B1+B2 Mechanic+ Electrical / Electronic	7 days = 42 hours	B1+B2 Mechanic+ Electrical / Electronic	11 days = 66 hours
Course Hour Fee	£25		
Accommodation Fee (Daily)	£30		

Table 3. Costs per Person for Beechcraft C-90GTI Type Training

Type of Training	Course Hours	Cost of Course Fee	Accommodation	Total Cost
B1	30 hours theoretical + 48 hours practical training = 78 hours	78 hours x 25 Sterling = £1950	13 days x 30 Sterling = £390	1950 + 390 = £2340
B2	30 hours theoretical + 60 hours practical training = 90 hours	90 hours x 25 Sterling = £2250	15 days x 30 Sterling = £450	2250 + 450 = £2700
B1+B2	42 hours theoretical + 66 hours practical training = 108 hours	108 hours x 25 sterlin = £2700	18 days x 30 Sterling = £540	2700 + 540 = £3240

Based on the information at the tables above (Table 2 and Table 3), C-90 GTI Type training requires time between 13 and 18 days according to license categories in terms of effect potential for man hour, which means that if the staff leaves the maintenance center for training, the maintenance unit has the potential to effect the production planning negatively. As it is not possible to send 6 participants to training in the current situation, it means that the current maintenance activities, related workshop practices and even the hitch risk of the training flights will increase significantly.

Depending on the increasing workload due to the low number of personnel, factors such as excessive fatigue, concentration deficiency may lead to a potential loss of motivational and productive efficiency in managing the safety risk.

Therefore, below mentioned subjects from the surplus value areas that were envisaged in the study started to be achieved during the study period:

- Resource saving
- Qualified production planning: Man hour plans and maintenance programs have been revised. The organizational structure for the new period has been revised, the roles and responsibilities have been clarified appropriately.
- In case the Rectorate requests, the type training and even the possibility to provide maintenance training to third persons have been made more advantageous and available.
- Eliminating the Resource Dependence in terms of human resource: With this study, having the advantage of raising its own human resources for the Maintenance Center, has also been achieved.

This success achieved in two aircraft types has been completed in terms of program and planning studies for the last aircraft type and the trainings are continuing.

In addition, as an example of financial savings:

Table 4. Example Table for Beechcraft C-90GTI Type Training Cost Gain

Type of Training	Number of Technicians	Cost Per Person	Cost
B1	2	£2340	£4680
B2	2	£2700	£5400
Total Cost			£10080

For training of 4 staff, a saving of £ 10080 will be obtained excluding the unit's man hour loss (Table 4).

The gain in man / hour has been very high because the type of training authorization was taken and the personnel was trained at duty place as man hour, and this hasn't cause any hitch at current maintenance work plans and flight schedules. If required, this cost can be calculated more detailed. Here, the detailed man / hour cost hasn't been done, in order not to cause any hitch at the work continuity, flight trainings and maintenance activities.

CESSNA 172S

Table 5. Course Hours and Fees for Cessna 172S Type Training

Theoretical Training		Practical Training	
B1 Mechanic	5 days= 30 hours	B1 Mechanic	10 days = 60 hours
B2 Electrical / Electronic (Avionics)	5 days = 30 hours	B2 Electrical / Electronic (Avionics)	10 days = 60 hours
Course Hour Fee	€27,77 (Euro)		
Accommodation Fee (Daily)	50 TL *		

(The offer was taken from Türkkuşu Flight Academy.)

** (Personnel to be trained are planned to stay at Anadolu University Ankara Guest House).*

Table 6. Costs per Person for Cessna 172S Type Training

Type of Training	Course Hours	Cost Of Course Fee	Accommodation	Total Cost
B1	30 hours theoretical + 60 hours practical training = 90 hours	90 hours x 27,77 Euro = € 2500	15 days x 50 ₺ = 750 ₺ (Turkish liras)	€2500 + 750 ₺
B2	30 hours theoretical + 60 hours practical training = 90 hours	90 hours x 27,77 Euro = €2500	15 days x 50 ₺ = 750 ₺ (Turkish liras)	€2500 + 750 ₺

Referring to above tables (Table 5 and Table 6), 15 days of time is required for Cessna type training, in each B1 and B2 license categories, which will require the relevant personnel to stay at least 15 days apart from the maintenance unit. This will both cause a negative effect on the production plan and create a risk about on time completion of the maintenance programs. Similarly, when the personnel go from here to training, the work load will increase as man hour in the aircraft maintenance unit, which will pose a risk in terms of safety and the amount of work completed.

Table 7. Example Table for Cessna 172S Type Training Cost Gain

Type of Training	Number of Technicians	Cost Per Person	Cost
B1	4	€2500 + 750 ₺	€10000 + 3000 ₺
B2	4	€2500 + 750 ₺	€10000 + 3000 ₺
Total Cost			€20000 + 6000 ₺

For example, if we assume that 4 staff members will go to B1 training for 15 days and after that they will go to B2 training for 15 days, the total savings will be about € 20000 + 6000 ₺ (Table 7). As a critical information, it is very unlikely that all personnel will be sent at the same time, as indicated. Because; it would not be possible **for** the approver staff to be in the maintenance center, and this will make it impossible to go on with maintenance activities and fulfil DGCA requirements with reduced personnel number. In addition, if the staff can not be sent at the same time, obtaining an institutional benefit from the authority taken, will be greatly delayed. This situation creates a potential threat for continuing the activities of the maintenance unit as it will create direct

first degree findings in DGCA and internal audits due to the increase in workload and risk of safety due to the failure to meet man hour requirements.

Therefore, type training can be completed in different periods, whereas all types of savings provided with the study and the technical personnel in categories B1 and B2 Avionics and Mechanical technicians can not be sent at the same time, as well as the course and accommodation expenses keeping in mind the losses of the maintenance center are calculated in man hour. This will delay the use of the benefits of type training.

Cost-wise, it seems that only the course fee and the travel allowance will be saved. Here, however, potential safety weaknesses arise and poor performance comes out due to the increase in work time loss and the workload in the unit, and the decrease in the number of personnel which bring risks to work, have been eliminated by the premise of this study and are presented as the most noteworthy study results.

To sum up, since there is no type training center for TB 20, the sum of cost savings is unknown, but with the critical advantage it provides, as an example; saving is € 20000 + 6000 ₺ for CESSNA 172S aircraft type, £ 10080 for BEECHCRAFT C-90GTI aircraft type, so total cost savings will be approximately £ 30080 + 6000 ₺. It is anticipated that the surplus value of the work generated by the study will be important from the institutional point of view when the savings provided by time savings and man hours loss is considered.

CONCLUSION AND ASSESMENTS

Significant contributions of the study to aviation applications is foreseen. In addition to basic training authority, the Faculty of Aeronautics and Astronautics has also received the authority to provide type training including Beechcraft 90 Series, Socata TB Series, Cessna / Reims-Cessna 172 / F172 Series aircraft types. This authority will enable aircraft maintenance technicians working at the University's Maintenance Center to take aircraft type trainings in fleet within the institution. Implementation of the type training authority will ensure that the flight trainings and activities of the Faculty of Aeronautics and Astronautics can not be interrupted, and keeping flights safe and effective can be supported at a high level. With this study, it will be possible to apply the authority acquired as soon as possible and follow the applications. This will increase the number of certificiated personnel in the University's Maintenance Center and solve the most pressing problem of the center. In addition, it will be possible to increase labor productivity, reduce external dependency about training, and effectively utilize institutional capacity and country's financial resources. However, by providing these trainings it will enable the University to lead the national aviation industry and other aviation faculties and to strengthen business associations with organizations. Thus, in the Turkish Civil Aviation by increasing the number of persons and organizations that have been received type training authority it is aimed at the improvement of working conditions of aircraft maintenance technicians in Turkey and to be guide in this regard.

One of the objectives of the study is to support the efficiency and productivity with qualified personnel. In addition, the study has saved money on training organization and training fees for university personnel. Thus,

University has the advantage that it can create qualified human resources itself and even give out type training to the outside. This has strategic significance in terms of managing the risk of resource dependence. In addition, the University has achieved a position and competitive advantage in the training of qualified technicians who are most needed and identified as one of the weakest aspects of aviation. University resources can also be used to increase and improve the capacity of the maintenance center. With this study, it is seen that the man / hour is very high as the personnel are trained on-site, do not interrupt current maintenance plans and flight schedules. It may be possible to ensure the continuity of the process by monitoring the results with the application of the type training authority and at the same time to determine the risks of the type training authority during and after the application process and to follow the performance of the type training process. In this context, observation and evaluation plans are already established. Thus, by ensuring the continuity and effectiveness of the process, it is aimed to use the institutional resources correctly and to keep the corporate contribution at a high level continuously.

The aviation industry is a strategic issue in terms of qualified human resources as well as critical in terms of maintenance safety aspects. Sustainability and competitiveness of aircraft maintenance institutions, which have a qualified, competent and motivated, and a human resource that uses corporate resources effectively and efficiently and the purpose of using the entire capacity for organizational purposes as in every business, are increasing. In this context, the university develops its related studies and strategies according to these assumptions. The study is presented as one of its concrete examples. Within the scope of the study, the research about the duration, the places and the fees of the related type trainings on the basis of the aircraft types are carried out. The results of this study show that the risk of going to related training by separating from the Eskisehir Technical University (ESTU) Aircraft Maintenance Unit for about 20 days is managed and thus it is ensured that works do not stop and continue by saving serious man-hours.

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