

Rzeszów University of Technology

Aviation Training Centre

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University Integrated Pilot Training Course Versus Bologna Process



KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY



Project nr POKL.04.01.01-00-110/09

From Zero to ATPL

14-15th September 2010, Zilinska Univerzita



Agenda:

1. **Aviation Training Centre – a short walk**
2. **Aviation training and higher education**
3. **A new concept of integrated course at three degree studies**
4. **Summary**

Aviation Training Centre

General information:

Founded by Rzeszów University of Technology in 1977 as flight training organization mainly for Polish national airlines LOT.

In 1990 it was fully took over by University as integral unit of the school.



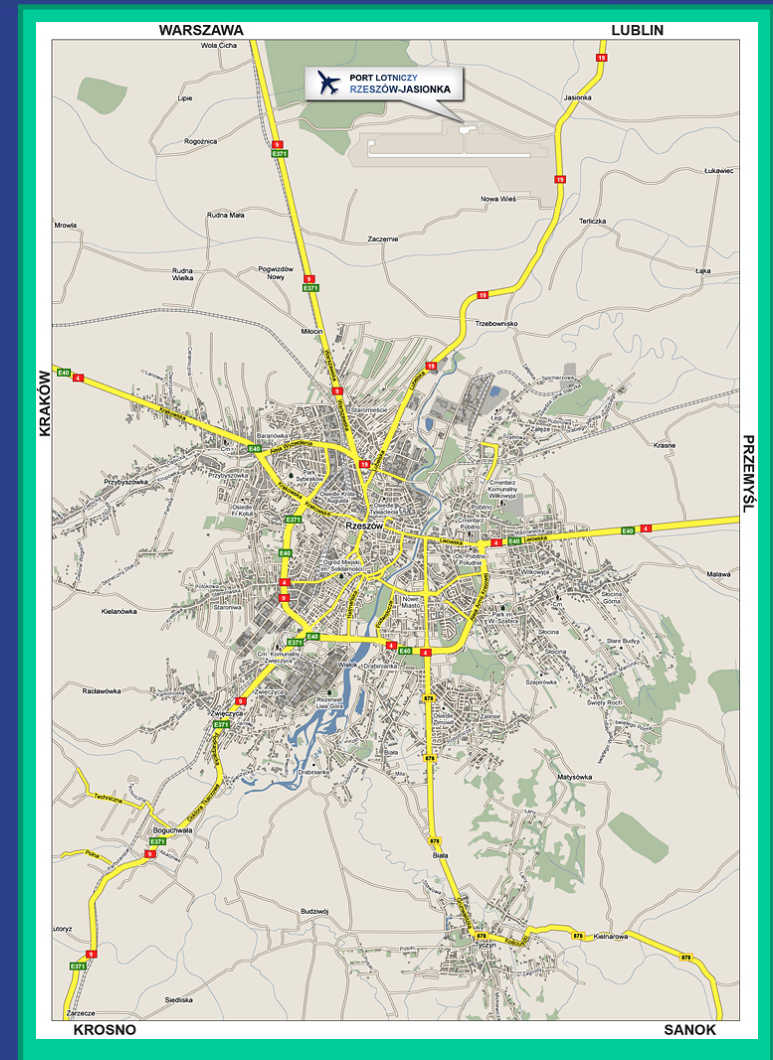


Aviation Training Centre

Location:

10 miles north of the Rzeszów following the road no.19 towards Lublin

The office and hangar is located at the southern edge of International Airport Rzeszów – Jasionka



Aviation Training Centre

Main purposes:

1. **In-flight training of students during their education at Aeronautics and Space Technology courses.**
Graduates of FTO are ready for Airline Transport License final exam, receive Instrument Rating and Multi Engine ratings and get Multi Crew Cooperation training.
Graduates of MTO get the license of technical crew according to PART-66
2. **Cooperation in research projects with University units and external partners.**
3. **Maintenance of own and external aircrafts.**



Aviation Training Centre

Certified organizations:

1. Flight Training Organization JAR-FCL FTO.03
2. Maintenance Organization PART-145.065
3. Continue Airworthiness Management Organization PART-M/G.525
4. Maintenance Personnel Training Organization PART-147.0006





Aviation Training Centre

Scientific research:



Fly-by-wire system for general aviation aircraft

Aviation Training Centre

Aircrafts:

PZL – 110 Koliber (Morane MS-880 Rallye) – 5 items



Aviation Training Centre

Aircrafts:

Socata TB-9 Tampico – 5 items



Aviation Training Centre

Aircrafts:

PZL M-20 Mewa (Piper PA-34 Seneca II) – 1 item



Aviation Training Centre

Aircrafts:

Piper PA-28 Arrow – 1 item



fot. Ryszard Dworak

Aviation Training Centre

Aircrafts:

I-23 – 1 item



Aviation Training Centre

Aircrafts:

Liberty Aerospace XL-2 – 5 items



ROZWÓJ
POLSKI WSCHODNIEJ
NARODOWA STRATEGIA SPÓJNOŚCI



Aviation Training Centre



Aircrafts:

Piper Seneca V – 2 items



Seneca V
2010 STANDARD PAINT SCHEME

Customer Name	J.B Investments Ltd. (Poland)
Serial Number	3449420
Registration Number	SP - TUD (cover w/ bedsheet)
Base Color A	P8293 Snow White
Bottom Color B	L0435 Medium Blue
Trim Stripe Color C	P1197 Royal Blue
Number Color	P1197 Royal Blue
Number Outline Color	P2333 Gloss Black
Number Shadow Color	P8293 Snow White
Underswing Number Color	P1197 Royal Blue

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Aviation Training Centre

Training device:

Alsim AL.-200 MCC





Aviation Training Centre

Development:



ROZWÓJ
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Aviation training and higher education

From militarized modules to integrated course

- 1. The origins of in-flight training at Rzeszów University of Technology have their roots in program of Aeroclub of People Republic of Poland.**
*Aeroklub PRL, Dział Szkolenia i Sportu *Szkolenie samolotowe – Program Szkolenia Samolotowego*. WKiŁ, Warszawa 1985.*
- 2. The years of experience lead to particular modifications in training program. The main emphasis was put on instrument flights and procedures of airline operators.**
The integration of the course took place a few years before mandatory JAR-FCL implementation.
Zintegrowany Program Szkolenia Samolotowego Studentów Politechniki Rzeszowskiej PSzSam OKL/96. Politechnika Rzeszowska Ośrodek Kształcenia Lotniczego, Rzeszów 1996.



Aviation training and higher education

Integrated ATPL(A) course

1. The training program is strictly bound up with the study course at Faculty of Mechanical Engineering and Aeronautics. The range of theoretical knowledge, required by NAA, is covered in academic subject. Students do not require to attend any additional courses or seminars.
2. The students obtain theoretical training at the level of ATPL(A) „frozen” and practical one – CPL(A), IR, MEP(L), MCC according to JAR-FCL1. The whole time they are student-pilots, with no staging licenses or ratings required. Moreover, each student is able to start training, with no previous experience in aviation even. Having well prepared evaluation and selection process, this kind of approach coincides with equal chance policy.

Program Szkolenia Zintegrowanego ATP(A) Z1/OKL/2003. Politechnika Rzeszowska Ośrodek Kształcenia Lotniczego, Rzeszów

Aviation training and higher education

Integrated ATPL(A) course

□	□	AC□	Dual□				PIC/SPIC·(Solo)□			
	Gnd□	Total□	VFR□	IF/AC□	Night□	IF/Sim□	VFR□	IF/AC□	Night□	XC□
JAR-FCL1□	-□	140:00□	27:00□	10:00□	3:00□	55:00□	50:00□	50:00□	2:00□	50:00□
University□	20:00□	199:32□	30:00□	16:00□	3:00□	60:00□	100:32□	54:00□	10:00□	110:00□

Remarks:¶

1. → All times in HH:MM-format¶
2. → AC → Aircraft¶
3. → Dual → flights with instructor¶
4. → Sim → flights on FNPTII/MCC¶
5. → PIC → Pilot in Command flights without instructor¶
6. → SPIC → ang. Student Pilot in Command → flights with instructor logged as pilot in command¶
7. → Gnd → Ground Training¶
8. → XC → Cross Country Flight□



A new concept of integrated training

Present situation:

1. The study path described above was adapted to the uniform M.Sc. studies.
2. Introduction of the Bologna Process with division of studies into three degrees, finished with a diploma each, caused a sudden break in the student's training.



Integrated ATP (A) course

month	semester	theory		practice		
		training	hours	phase	A/C	Sim
Oct-Jul	sem. 1 - 2	no training				
Jul	sem 3					
Aug						
Sept		no training				
Oct						
Nov						
Dec	sem 4	ATP(A)		210		
Jan						
Feb						
Mar						
Apr						
May	sem 5	ATP(A)		195		
Jun						
Jul						
Aug						
Sept						
Oct	sem 6	ATP(A)		225		
Nov						
Dec						
Jan						
Feb						
Mar	sem 7	ATP(A)		225		
Apr						
May						
Jun						
Jul						
Aug	sem 8					
Sept						
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A new concept of integrated training

Present situation:

3. **Regardless to the studies division, the student stays still in integrated training, because NAA takes the view that break in studies is not the break in training.**
4. **Finishing the second degree studies, alumni gain the same licenses and ratings, as it was in previous course.**



A new concept of integrated training

Hazards:

5. **If the student would not take up studies of second degree, he would break the integrated training and leaves the University as student-pilot with useless 120 hours of total flight time.**
6. **If the student would not defend the engineer thesis on time, he would be moved back in course and therefore he would exceed the 36 months period of training.**
7. **There might appear some candidates for second degree studies from outside of University with better entrance conditions than our students.**



A new concept of integrated training

Assumptions:

1. The new solution should give, simultaneously, an engineer degree and some kind of closed training for commercial license with supplementary ratings.
2. The studies of second degree should have a pack of additional training to enable student to obtain the same (or higher) level of professional education, which is at present time.



month	semester	CPLMR + ME, IR/ME, MCC, JOC, ATP (A)				
		theory	practice	training	hours	phase
Oct-Jul	sem. 1 - 2	no training				
Jul		CPLMR	70			
Aug				1, 2	40:00	5:00
Sept						
Oct						
Nov						
Dec	sem 3	CPLMR	150			
Jan						
Feb						
Mar						
Apr	sem 4	CPLMR	150			
May						
Jun						
Jul				3, 4	50:00	5:00
Aug						
Sept						
Oct						
Nov						
Dec	sem 5	CPLMR	150			
Jan						
Feb						
Mar						
Apr	sem 6	CPLMR	150			
May						
Jun						
Jul				4	40:00	
Aug						
Sept						
Oct						
Nov						
Dec	sem 7					35:00
Jan						
Feb						
Mar						
Apr	sem 8			4	15:00	
May						
Jun						
Jul						
Aug						
Sept						
Oct						
Nov	sem 1	ATP (A)	225			
Dec		MEP(L)	15			
Jan						
Feb						
Mar						
Apr	sem 2	ATP (A)	225			
May		MCC JOC	45			
Jun			15	MEP (L)	6:00	
Jul				IR/ME	2:00	3:00
Aug						
Sept				MCC		20:00
Oct				JOC		10:00
Nov						
Dec	sem 3					
Jan						
Feb						
Total			1195		153:00	78:00

30 months period



Summary

The solution presented here:

- **Is coherent with the new division of study course into three degrees. The time of in-flight training is similar to the total time of studies.**
- **Gives better ground for the clear evaluation of the candidate;**
- **Retains the form of iterated training;**
- **Does not increase the total flight time in comparison to the present one;**
- **Enables to extend the range of ratings obtained by students.**



Thank you for your attention...