



# AeroLogLab ITA

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**Rockwell  
Collins**





AeroLogLab **ITA**

# Project Overview

The Objective is the development of a Logistics Engineering Lab at ITA with the collaboration of Industry, Government and Academia

Once implemented it would be able to innovate, to research and to learn together with its partners and to deliver sound applied and academic research on Logistics and Maintenance Engineering in a full triple helix environment.

**Provide proper logistics engineering background for undergraduate and graduate students at ITA**



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# Project Overview

The academic core is composed by ITA and ILA, from the Brazilian side, and by LTU, from the Swedish side.

The Aeronautic Industry partners (until now) are Embraer and Akaer, from the Brazilian part, and Saab and Systecon, the Swedish part.

Brazilian Government is supporting the project by ITA/ILA (Brazilian Air Force Research Institutes), by the COMGAP (Air Force System Program Office of the Gripen and the KC-390) and by the DCTA (Air Force R&D Department and the System Program Acquisition Office for the Gripen and KC-390)



## Relevance

The Gripen and KC-390 encompass at least 41 years of life cycle development, operations and support for the Brazilian Air Force and for other customers. Just the amount of money involved would be enough motivation to develop research regarding the major logistics factors affecting it. Timing and system's approach are also crucial for the case. Their life cycle logistics and maintenance implications are just examples of the Logistics Engineering Lab's participation in terms of benefits for other systems.

Another good example from industry is in a product development environment able to integrate requirements coming from different phases of product specification, sizing, interfaces, industrialization, manufacturing, maintenance and operation



## REGULAR EDUCATION ROADMAP

Minor	Specialization	Undergraduate	Graduate	Post Graduate
ILS Development	ILS Development	Menu of Logistics Engineering disciplines to be offered within the existing Engineering Courses	Maintenance Engineering Double Diploma MSc (ITA-ILA-LTU)	Maintenance Engineering Double Diploma PhD (ITA-ILA-LTU)
2016/17	Already OK	2016	2018	2018
-	-	Coursework Supervision in Logistics Engineering	Development of a Logistics Engineering MSc at ITA-ILA	Development of a Logistics Engineering PhD at ITA-ILA
		2016	2018	2020
-	-	-	-	Post-Doctorate at LTU
				2016

## AERONAUTICAL LOGISTICS ENGINEERING WORKSHOPS AND SEMINARS

Academic	Applied	Dedicated	In-Company	Defence
		2017		



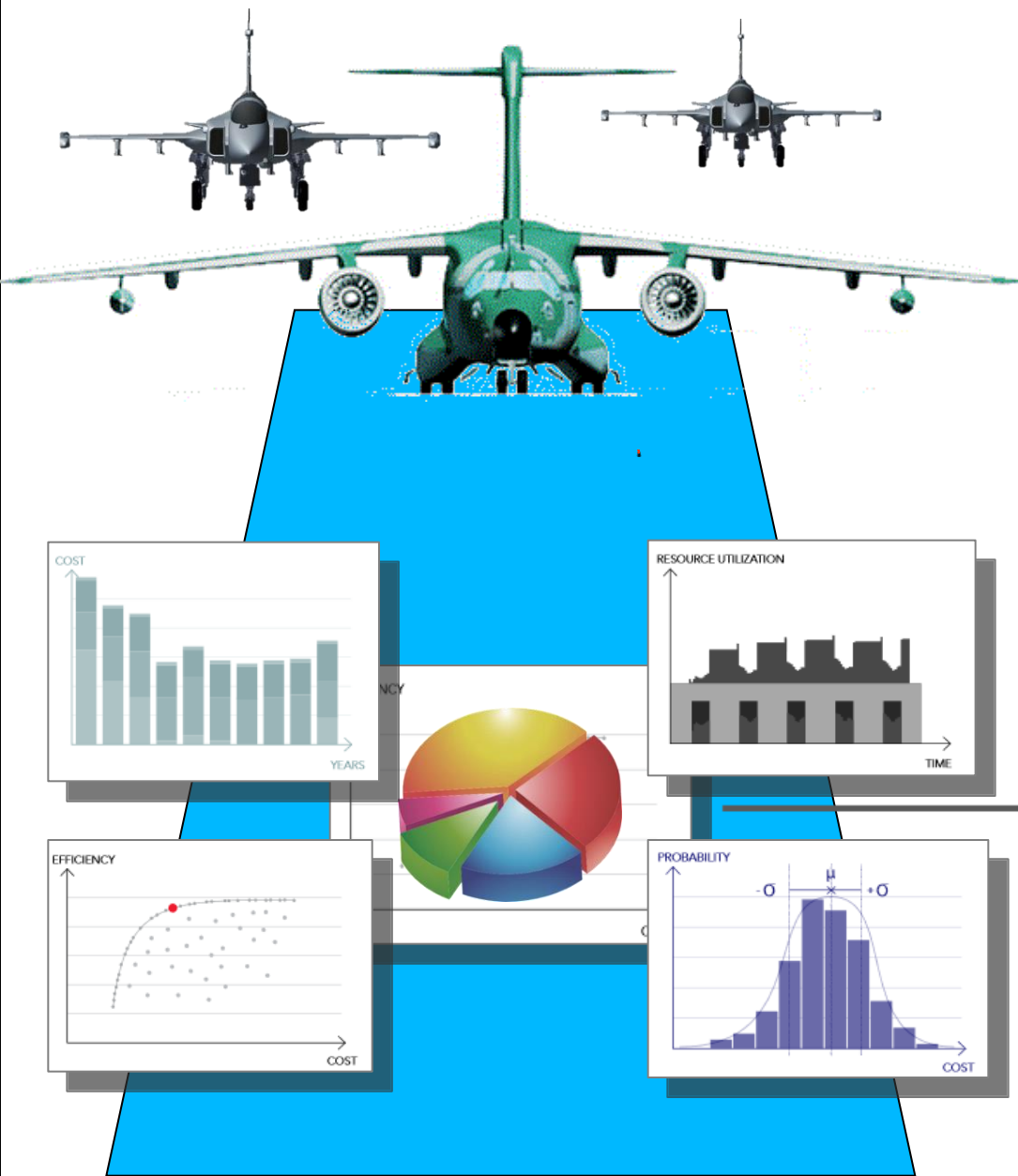
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## RESEARCH ROADMAP

	Research #1	Research #2	Research #3	Research #4	Research #5	Research #6
F-X2	Deployment Logistics 2017/18	Mid life Upgrade Logistics 2018/19	Obsolescence Logistics 2018/19	Dynamic Maintenance Logistics 2019/20	Fleet Readiness Assurance 2019/20	eMaintenance 2018
KC-390	Deployment Logistics 2016/17	Mid life Upgrade Logistics 2017/18	Obsolescence Logistics 2018/19	Dynamic Maintenance Logistics 2019/20	Fleet Readiness Assurance 2019/20	eMaintenance 2018
Sys-X	Deployment Logistics 2016/17	Mid life Upgrade Logistics 2017/18	Obsolescence Logistics 2018/19	Dynamic Maintenance Logistics 2019/20	Fleet Readiness Assurance 2019/20	eMaintenance 2018

**Present**

**Future**



RAMS Project:  
Plan/Development 5 - 6 years

System Logistics  
Engineering  
Optimization and simulation  
Life Cycle Management  
analysis  
Software development  
Market analysis  
Pricing analysis  
Analysis future service  
concepts

Analyzing potential clients

Analysis of effective  
knowledge transfer