

GA number: Project acronym: Project title:	815058 FLIPASED FLIGHT PHASE METHODS	ADAPTIVE	AERO-SERVOELA	STIC AIRCRAFT DESIGN
Funding Scheme: H	2020	ID: MG-3-1-	2018	
Latest version of Ar	nnex I:	1.1 released	l on 12/04/2019	
Start date of project	:: 01/09/2019	Duration: 4	0 Months	
Lead Beneficiary fo	r this deliverable:			SZTAKI
Author(s): Virág Boo	lor			
Last modified: 14/09	9/2020			Status: delivered
Due date: 29/02	2/2020			
Project coordinator	name and organis	sation:		Bálint Vanek, SZTAKI
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Project website:

	Dissemination Level:	
СО	Confidential, only for members of the consortium (including the Commission Services)	
PU	Public	х

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flipased.eu



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1 Executive Summary

This document presents the development of the webpage and social media channels of FLIPASED project. The project website is to provide information on basic project information, partners, publications, links and contact information. Mathematical models of the demonstrator developed for aircraft design are to be posted on the project website, together with ground and flight test data of various aircraft configurations, to provide a benchmark for the entire community. Project news are posted on Linkedin and Researchgate.



2 Description

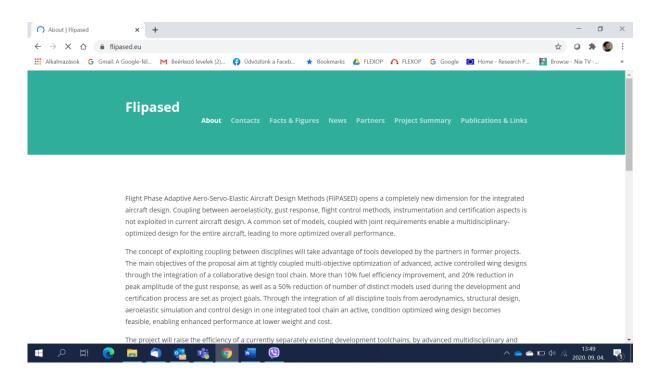
2.1 Full description of the approach and results

2.1.1 Project webpage - https://flipased.eu/

The project website was set up in M8 to provide information on basic project information, partners, publications, links and contact information. Mathematical models of the demonstrator developed for aircraft design will be posted on the project website, together with ground and flight test data of various aircraft configurations, to provide a benchmark for the entire community.

The webpage consits of the following pages (see the 6 different screenshots below).

The page ABOUT contains the project abstract.





The page CONTACTS contains the contact details for the project coordinator :

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👯 Alkalmazások 🔓 Gmail: A G) Üdvözlünk a Faceb 🔺 Bookmarks 💧 FLEXOP 🏠 FLEXOP 🌀 Google 🛅 Home - Re	esearch P 🚯 Browse - Nia TV »
	Flipaseo About C	ntacts Facts & Figures News Partners Project Summary Publications	& Links
	Contact Details		
	Project coordinator	Bálint Vanek	
	Title	Ph.D., senior research fellow	
	Organisation	Institute for Computer Science and Control	
	Department	Systems and Control Lab	
	Telephone	+36 1 279 6113	
	Fax	+36 1 466 7483	
	E-mail	vanek@sztaki.hu	
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The page FACTS AND FIGURES contains basic information about the H2020 project (call, topic, budget) :

Alkalmazások G	Gmail: A Google-fél M Beérkező levelek (2) 😝 Üdvöz	lünk a Faceb ★ Bookmarks 🝐 FLEXOP 🐴 FLEXOP 🌀 Google 🔯 Home - Research P	Browse - Nia TV
	Facts & Figures		
	Project Title	FLIGHT PHASE ADAPTIVE AERO-SERVO-ELASTIC AIRCRAFT DESIGN METHODS	
	Grant Agreement Number	815058	
	Project Acronym	FLIPASED	
	Call identifier	H2020-MG-2018-TwoStages	
	Торіс	MG-3-1-2018 Multidisciplinary and collaborative aircraft design tools and processes	
	Starting date	01/09/2019	
	Duration	40 Months	
	Person Months planned for implementation	404.40	
	Consortium meetings planned	7	



The page NEWS contains the relevant news about the project (articles, announcements, posts, project related communication) :

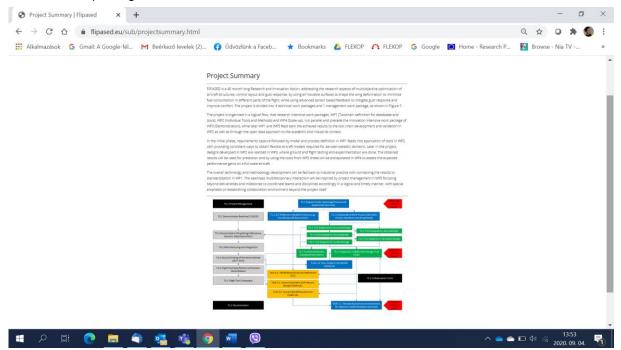
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	SZTAKI, Hungary, leading EU research on active control of aero-elastic aircraft wings 09/13/2019 H2020 project FLIPASED was launched officially on Thursday Researchers of SZTAKI, Institute for Computer Science and Control, Hungary, will lead the international project FLIPASED (FLight Phase Adaptive Aero-Servo-Elastic aircraft Design) which intends to revolutionize aircraft wings through developing and testing the so called active-controlled wings. Besides the coordination of the project, to be managed by Bálint Vanek, SZTAKI will work on the fields of control theory and aircraft design in a multidisciplinary environment in order to tighten the connection between the physical configuration of aircrafts and their on-board flight control algorithms.		12/51	
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The page PARTNERS contains the name and logo of project partners with link to their web pages:





The page PROJECT SUMMARY contains info about the structure work breakdown with info about the different work packages:

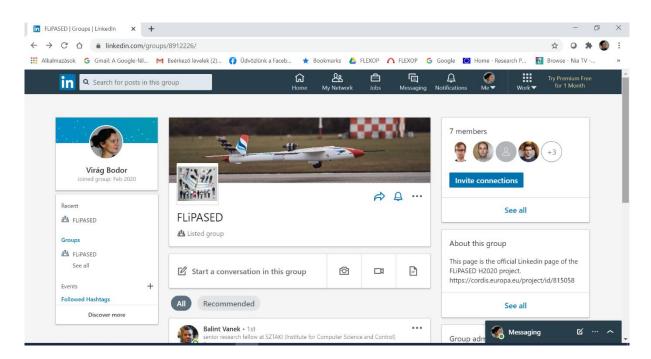


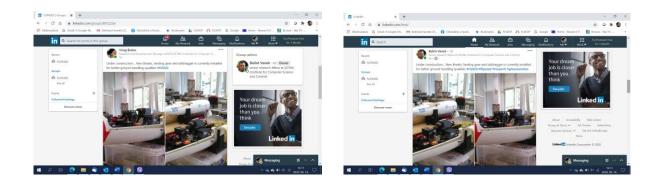


2.1.2 Social media channels

Linkedin

Coordinator has created a group on Linkedin where we post the recent newsworthy items about the project. Group members can share the content on their own linekdin profiles where it is accessible for the public. The proposed text for posts are also sent to the consortium embers via e-mail (with illustration attachements).







Researchgate :

In the past years Researchgate became a major channel to build professional relations based-on common research interest, share research and make discussions about different topics. That's why it was decided to show FLIPASED project and research team on this page. The first step was to upload a research proposal and invite all missing team members to Researchgate through this (there was an information stating that only existing members can be invited into a project). The proposal page can be seen below :

Research Proposal File available FLIGHT PHASE ADAPTIVE AERO-SERVO-ELASTIC AIRCRAFT DESIGN METHODS september 2019 Charles Poussot-Vassal - Pierre Vuillemin - S Arnaud Lepage - Show all 44 authors - Seter Seiler	Research Interest ① Citations Recommendations ④ ۞ Reads ① · \varTheta ⑨ 🛸	 2 5.6 0 (1 new) 2 (1 new) 92 See details
Overview Stats Comments Citations References Related research (10+)	Share 🗸
Description Objective Flight Phase Adaptive Aero-Servo-Elastic Aircraft Design Methods (FliPASED) opens a complete new dimension for the integrated aircraft design. Coupling between aeroelasticity, gust response, flight control methods, instrumentation and certification aspects is not exploited in current aircraft design. A common set of models, coupled with joint requirements enable a multidisciplinary-optimized design for the entire aircraft, leading to more optimized overall performance. The concept of exploiting coupling between disciplines will take advantage of tools developed by the partners in former projects. The main objectives of the proposal aim at tightly coupled multi- objective optimization of advanced, active controlled wing designs through the integration of a collaborative design tool chain. More than 10% fuel efficiency improvement, and 20% reduction in peak amplitude of the gust response, as well as a 50% reduction of number of distinct models used during the development and certification process are set as project goals. Through the integration of all discipline tools from aerodynamics, structural design, aeroelastic simulation and control design in one integrated tool chain an active, condition optimized wing design becomes feasible, enabling enhanced performance at lower weight and cost. The project will raise the efficiency of a currently separately existing development toolchains, by advanced multidisciplinary and collaborative capabilities for whole aircraft along its life cycle. It will develop methods and tools for very accurate flexible-mode modelling and flexible aircraft control synthesis, in the context of reliable implementation of the avionics system, taking into consideration the fault detection and reconf <u>Read more</u>	European Commission Image: Commission	CURES Communities Communities open access to our

The next steps were to add the project page including 45 members of the research team to make regular updates and add all related references (currently 22). References are currently mainly from the predecessor Flexop project but they will be regularly updated as the project goes forward. Screenshots about the project page, updates and references can be seen below.



Project FLIGHT PHASE ADAPTIVE AERO-SERVO-ELASTIC AIRCRAFT

DESIGN METHODS

🌒 Péter Bauer · 🚱 Charles Poussot-Vassal · 💿 Pierre Vuillemin · <u>Show all 45 collaborators</u>

Goal: Flight Phase Adaptive Aero-Servo-Elastic Aircraft Design Methods (FliPASED) opens a complete new dimension for the integrated aircraft design. Coupling between aeroelasticity, gust response, flight control methods, instrumentation and certification aspects is not exploited in current aircraft design. A common set of models, coupled with joint requirements enable a multidisciplinary-optimized design for the entire aircraft, leading to more optimized overall performance. The concept of exploiting coupling between disciplines will take advantage of tools developed by the partners in former projects. The main objectives of the proposal aim at tightly coupled multi-objective optimization of advanced, active controlled wing designs through the integration of a collaborative design tool chain. More than 10% fuel efficiency improvement, and 20% reduction in peak amplitude of the gust response, as well as a 50% reduction of number of distinct models used during the development and certification process are set as project goals. Through the integration of all discipline tools from aerodynamics, structural design, aeroelastic simulation and control design in one integrated tool chain an active, condition optimized wing design becomes feasible, enabling enhanced performance at lower weight and cost. The project will raise the efficiency of a currently separately existing development toolchains, by advanced multidisciplinary and collaborative capabilities for whole aircraft along its life cycle. It will develop methods and tools for very accurate flexible-mode modelling and flexible aircraft control synthesis, in the context of reliable implementation of the avionics system, taking into consideration the fault detection and reconfiguration. The accuracy of developed tools and methods will be validated on a safe and affordable experimental platform. and results will be shared along with design requirements and standardized interfaces in an open source approach.

Updates	(0 new) 3
Recommendations	(0 new) 0
Followers	0 new 4
Reads 🛈	(19 new) 19

Add research

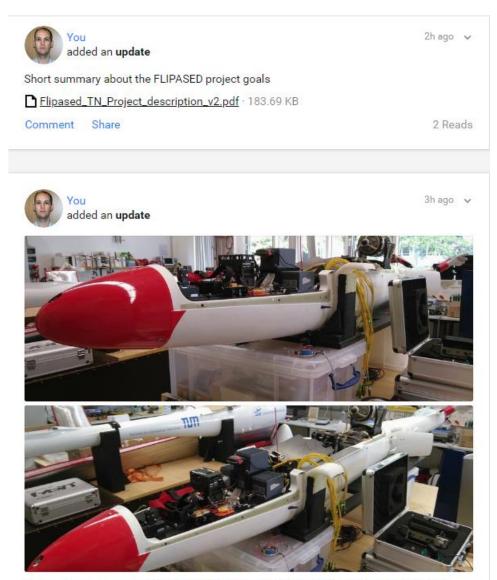
Add update

Hide details

Overview Project log References (22)

FLiPASED Project page in Researchgate





Under construction... New Breaks, landing gear and taildragger is currently installed for better ground handling qualities.

Follow our webpage: https://flipased.eu/

Twitter: https://twitter.com/flipased

#H2020 #FLIPASED #greenaviation #research

or Linkedin group: https://www.linkedin.com/groups/8912226/

FLiPASED updates in Researchgate



Research referenced in this project

Add more references

	nd Testing of the FLEXOP Demonstrator Aircraft	
Conf	erence Paper Jan 2020	
🕘 Ju	rij Sodja · 🌒 Roeland De Breuker · 🍥 Yasser Meddaikar · [] · 🌗 Bálint Vanek	
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Activ	e Flutter Mitigation Testing on the FLEXOP Demonstrator Aircraft	
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FLIG	HT PHASE ADAPTIVE AERO-SERVO-ELASTIC AIRCRAFT DESIGN METHODS	
Rese	arch Proposal Full-text · Sep 2019	
🚷 Ch	arles Poussot-Vassal · 🔘 Pierre Vuillemin · 🔱 Arnaud Lepage · [] · 🍥 Peter Seiler	
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Ident	ification and Modeling of the Airbrake of an Experimental Unmanned Aircraft	
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_	le Full-text · Sep 2016 · International Journal for Numerical Methods in Engineering	
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Part of the FLiPASED references list in Researchgate



3 Conclusion

The home page and social media channels were set up during the first year of the project. The consortium will monitor the new possibilities and adjust the communication strategy accordingly.