FEATI UNIVERSITY

Things are Looking Up

FEATI Initiatives for UAV Development

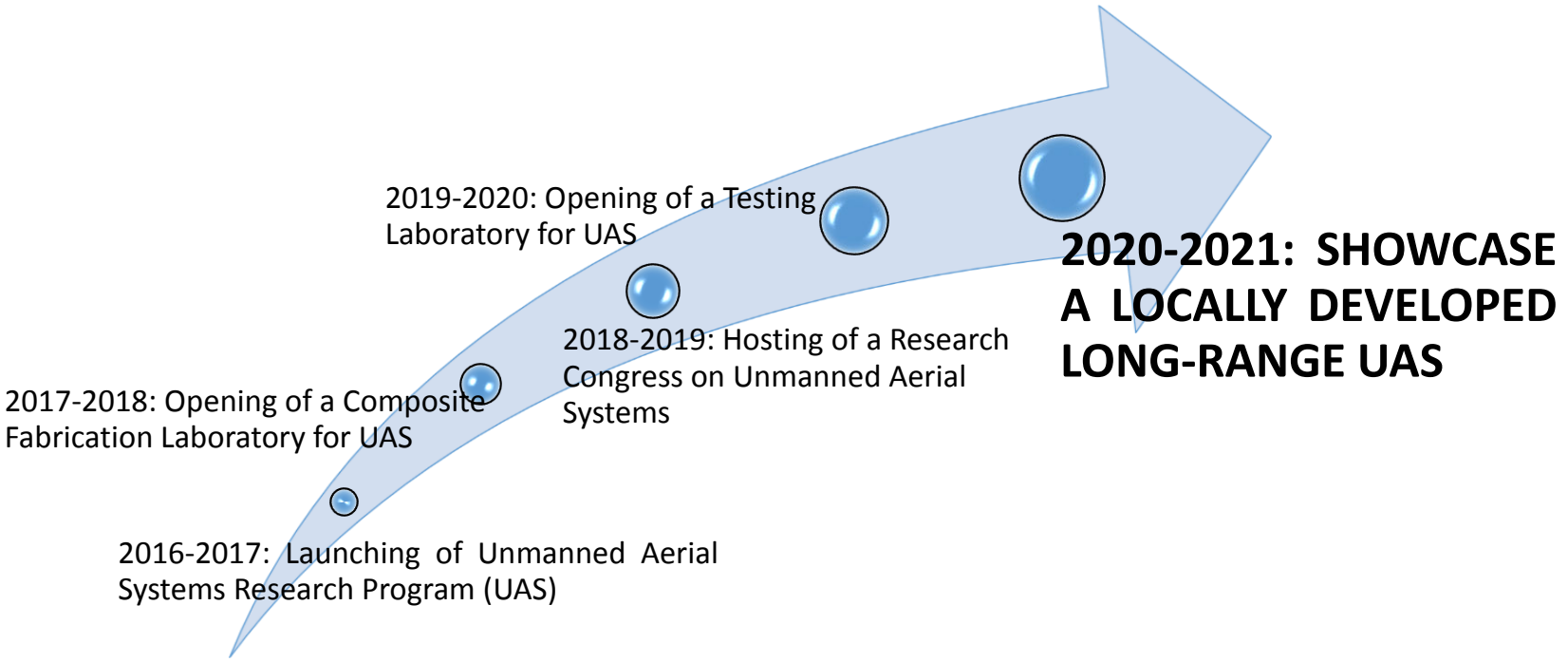
UNMANNED AERIAL VEHICLE (UAV)
R&D CONSORTIUM ROADMAPPING CONSORTIUM,
Ateneo De Manila University, April 22, 2016

Project LAWIN

DOST-PCIEERD Project Title:
Development of Low-altitude Aircraft for Wide-field Imaging and Navigation (LAWIN) as Remotely Piloted Aircraft System (RPAS) for Disaster Risk Reduction–Climate Change Adaptation (DDR-CCA)

General Objective:
Develop a first prototype of Low-altitude Aircraft for Wide-field Imaging and Navigation (LAWIN-1) as a remotely piloted aircraft system (RPAS) that can be used for conducting disaster assessment and relief operations in areas struck by natural calamities

5-Year Research Program for Long-Range UAS



Milestones

2016-2017	• Procurement of facilities and equipment for Composite Laboratory • Conceptualization and Design of Unmanned Aerial Systems
2017-2018	• Testing of Unmanned Aerial System Designs through Simulations • Application for Patents
2018-2019	• Hosting of Research Congress on Unmanned Aerial Systems • Presentation (Local/International) and Publications (Peer Reviewed/Refereed/ISI and Scopus Indexed Journals) of Research Results
2019-2020	• Procurement of a wind tunnel • Testing of Unmanned Aerial Systems Designs through the use of a wind tunnel • Presentation (Local/International) and Publications (Peer Reviewed/Refereed/ISI and Scopus Indexed Journals) of Research Results
2020-2021	• Launching of LOCALLY DEVELOPED UNMANNED LONG-RANGE AERIAL SYSTEMS • Commercialization of unmanned aerial systems

Project BAGWIS

DOST-PCIEERD Project Title:
Development of Bi-modal Airframe Geared for Wide-field Imaging and Support (BAGWIS) as for Disaster Risk Reduction–Climate Change Adaptation (DDR-CCA)

General Objective:
Design and fabricate a long-range, long-endurance, and heavy-lifter airframe using composite materials for surveying for post-disaster assessment and logistical support for human-relief operations

R&D GAPS & POSSIBLE COLLABORATORS

UAV DEVELOPMENT	CURRENT UAV MARKET SITUATION (SUPPLY AND DEMAND)	R&D GAPS	POSSIBLE COLLABORATORS (ACADEME / NGAs / PRIVATE)
MATERIALS		Use of indigenous fibers for composite fabrication	FIDA-FUTD MIRDC
PAYLOAD		Human relief operations supply	NDRRCMC Coast guard Red Cross Phil Navy
FLIGHT CHARACTERISTICS		Use of long-range, long endurance, heavy-lifter fixed wing	FEATI
OPERATING REQUIREMENTS		Mission specifications from Government Agencies	NDRRCMC Coast guard Red Cross Phil Navy

R&D GAPS & POSSIBLE COLLABORATORS

UAV APPLICATIONS	CURRENT UAV MARKET SITUATION (SUPPLY AND DEMAND)	R&D GAPS	POSSIBLE COLLABORATORS (ACADEME / NGAs / PRIVATE)
DISASTER SEARCH AND RESCUE		Long-range UAV for logistical transport for human relief operations	NDRRCMC Coast guard Red Cross Phil Navy
POST-DISASTER ASSESSMENT		Long-range UAV for logistical post-disaster assessment	NDRRCMC DA

R&D GAPS & POSSIBLE COLLABORATORS

HR DEVELOPMENT / INSTITUTIONAL BUILDING	CURRENT UAV MARKET SITUATION (SUPPLY AND DEMAND)	R&D GAPS	POSSIBLE COLLABORATORS (ACADEME / NGAs / PRIVATE)
TRAINING		Aircraft design and composite fabrication	FEATI Heatcon/Aeroframe
POLICIES		Regulations and operational protocols for RPAS R&D	CAAP
TESTING / SIMULATION FACILITY		UAV testing facility (i.e., wind tunnel testing facility)	FEATI