

**UNIVERSITY OF LOUISIANA
AT LAFAYETTE**

STEP Committee

Technology Fee Application

Phantom 4 Pro Maintenance

Title

**Dr. Michael Gervais, Mr. David Lynch, and
Mr. Virgile Beddok**

Name of Submitter
(Faculty or Staff Only)

**Department of Communication and Moving
Image Arts**

Organization

Title: Phantom 4 Pro Maintenance Date: 1-14-19
Name (Contact Person): Dr. Michael Gervais
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Phone Number: x26107 Email: mgervais@louisiana.edu
Department/College/Org: Department of Communication & Moving Image
Arts

ABSTRACT (250 words or less):

This grant is to fund \$2,235 for warranty renewals on five DJI Phantom 4 Drones currently being used in the Communication and Moving Image Arts programs. Over the first year of use in classes, the landings by students have been rough. Currently, two of the five are off for warranty repair to their landing gear and camera gimbals. If not under warranty, the cost of repairs would have been well over \$3,000. Without additional funding available, repairs cannot be made for future damage or non-functioning equipment. Protecting the drones with warranty extensions would ensure availability to students for several years to come.

I. Purpose of grant and impact to student body as a whole

The purpose of this grant is to protect the investment in DJI Phantom 4 Pro Drones. Without the DJI Care Refresh warranty extension, we may run into problems providing students with drones for their classes as the company's one-year warranty runs out. As this is a main component of the MIA Aerial Cinematography class, this might be important in continuing and developing the class over the years. Nearly every student who has taken the class over the past two semesters is inexperienced in flying drones. While every attempt is made to have safe flights by the instructors, the hands-on nature of the class means that students will often have rough landings with the aircraft or crash into obstacles. Most of the parts on the drone are expensive to replace and only certified DJI technicians can repair many of the mechanical problems. With extended warranty coverage, the aircraft, gimbal, camera, and propellers – even if the aircraft is totaled or water damaged in a crash – are covered by the company, including shipping both ways.

The existing Aerial Cinematography class using the drones, under Moving Image Arts, is still in its early stages and is working towards expanding the class, working on university-sponsored projects, and adding more classes in the future. The Department of Communication is also working on mirroring the class so it can be taken by students interested in Broadcasting.

Justification for the proposed equipment is as follows:

1. Five (5) DJI Care Refresh warranties (\$149 each) for three years (2019 – 2021) to cover defective, malfunctioning, or damaged equipment on the five (5) existing departmental DJI Phantom 4 Pro drones.

II. Projected lifetime of enhancement: The lifetime of this grant would be for three (3) years. The warranties would be purchased on a yearly basis for \$745 (\$2,235 total).

III. Person(s) responsible for:

1. **Implementation:** Dr. Michael Gervais, Chief Engineer for the Department of Communication.
2. **Installation:** Dr. Michael Gervais, Chief Engineer for the Department of Communication.
3. **Maintenance:** Dr. Michael Gervais, Chief Engineer for the Department of Communication.
4. **Operation:** Students taking Moving Image Arts' Aerial Cinematography class are currently using the Phantom 4 Pro drones. The class is taught by Mr. Virgile Beddok and assisted by Dr. Michael Gervais and Mr. David Lynch, all of whom are certified FAA sUAS drone pilots.
5. **Training (with qualifications):** No training required.

IV. Discuss all previous funded STEP projects:

Dr. Michael Gervais recently received a Fall 2016 grant for the Department of Communication, “V. L. Wharton Hall 213 Classroom PC Computer Replacement,” for \$37,150 and “Burke-Hawthorne Hall 250 Classroom PC Computer and Printer Replacement, SPSS Software Renewal, & Vision Pro Software Installation” for \$23,510 (Gervais, Davie, and Latour.) Past awards the department has received include a Fall 2015 STEP grant, “Completion of SMART Classroom Technology in Burke-Hawthorne Hall (117 & 250),” by Gervais for \$36,000 to upgrade to SMART technology in Burke-Hawthorne rooms 250 and 117. The department also received a Fall 2014 grant, “Audio Instructional Lab Upgrade (Burke-Hawthorne Annex),” by Gervais and Davie for \$6,280 to upgrade software and equipment for the audio production labs in the Burke-Hawthorne Audio Annex.

Mr. Lynch has received a number of STEP grants over the last 15 years. The most recent of the awarded grants are: EDCI Mobile Computer Carts (2014), Macintosh Campus Lab Integration (2014), Materials Center Computer Update (2014), UAV’s for Student Use (2014), Reading Lab Podium Computer Replacement (2015). Materials Center RAM and SSD Upgrades (2017)

Budget Proposal

1.	Equipment	\$0
2.	Software	\$0
3.	Supplies	\$0
4.	Maintenance	\$ 2,235: Five (5) DJI Care Refresh extended warranties for three (3) years
5.	Personnel	\$0
6.	Other	\$0

TOTAL: **\$2,235**