GoPro for Flight Instruction reviews  
Submitted March 4, 2015 at 9:13 am

Application

Application Type: Educational

Funded: No

Prior ACITC Funding?: No

Description

This proposal is being jointly submitted by Ismael Cremer and Victoria Dunbar from the College of Aeronautics. 

Project Goals, Objectives & Outcomes:

The goal of our project is to develop a means to utilize GoPro cameras to record video footage of flights at FIT aviation. This can be used for any flight course at the flight line.

New flight students can spend many flight hours going over a particular flight training exercise. Sometimes they repeat mistakes that can be fixed by using a better way to review their flight other than just orally by the flight instructor.

The objective of this project is to implement the use of GoPros in aircraft to record the flight and the audio transmissions associated with it and allow the flight instructor to review portions of the exercises that were completed in the air once they return from the flight.

There are 2 goals that we wish to accomplish. First, to have the students be able to review their flight, their radio transmissions, and to see and hear areas where they can improve. This should improve their flight skills and save money on remedial flights.

The second goal is to advertise this process because it is unique and not currently implemented by most flight schools. This can potentially recruit new flight students to the program and will also increase the image of the flight program.

In summary the project will do the following:

(1) Improve flight skills of students.
(2) Allow flight instructors to clearly show areas that may need improvement.
(3) Market the flight program through this unique and innovative concept. We propose that this be experimented with 2-3 aircraft instead of a whole fleet to see how well it works. A research project can also be conducted alongside this one to measure its effectiveness.

Student Participation in Project:
Students will be interacting with the videos

Interdisciplinary Features:
This project will be involve College of Aero students but can also include any student that wishes to take flight. This project will supplement the research proposal very well.

Please click on this link to see an EXAMPLE FLIGHT VIDEO of what the flight lesson recording can be:

https://www.youtube.com/watch?v=Y_w-4n4tNFw

ITEMIZED EXPENSES

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Detailed Description Of Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>$1,480.00</td>
<td>3 GoPros 3+ silver edition = 3x $300 = $900 5 battery packs for rotation = 5 x $25 = $125 Sticky mounts = $20 3 cables for headset audio recordings = 3 x $70 = $210 3 SD 64GB = 3 x $50 = $150 Misc. budget (e.g. carrying case x 3, extra cables, charging station) = $70</td>
</tr>
<tr>
<td>Software Purchases</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>Student Stipends</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>Misc</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>$1,480.00</td>
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Budget Justification

We intend to run this project with 3 gopros for the time being. If this is successful it would be great to increase the number available in the future.

The batteries are necessary so that a charged battery will always be available when a flight is scheduled.

64 GB SD cards allow for continuous recording up to 5 hours (if an instructor wishes to record the whole flight)

There are unique cables that are adapters to record the cockpit audio radio communications – they are an extra separate item at $50-60 a piece.