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Jim Chalfant

Chair, Academic Council

RE: Presidential Unmanned Aircraft System (UAS) Policy

Dear Jim:

The draft Presidential UAS Policy was forwarded to all standing committees of the Davis Division. Three committees responded: Academic Freedom and Responsibility (CAFR), Research (COR), and the Faculty Executive Committee (FEC) of the College of Agricultural and Environmental Sciences.

CAFR thinks the policy is reasonable. COR, while supportive, expressed concerns about clarity and transparency in the "UAS Request Form" required by the policy. COR asks: "What information must be provided on the request form? Who will evaluate the requests and what are their credentials? What criteria are used to evaluate the requests? What are grounds for rejecting the requests? Is there an appeal process? How far in advance must the forms be submitted and how long will it take to receive a response?"

In a very careful and detailed response, the FEC of CAES argues that the proposed policy is redundant with existing Federal regulations, creates inadvertent safety risks, and requires burdensome administrative procedures. The FEC thinks the proposed policy does not "adequately articulate the problems that will be addressed by these new administrative procedures nor does it articulate the benefits that will be realized. The UC system needs to be clear about which risks are not already being mitigated by existing FAA regulations, and then must construct a policy to continually identify and reduce those risks through additional oversight."

In regards to safety, the FEC thinks the proposed UC preapproval of each flight, which could take up to two weeks, is "unnecessarily burdensome on research activities involving UAS" and is "potentially dangerous." The FEC notes that "UC approval, of which the criteria for approval are not specified in the proposed policy, cannot anticipate the immediate, local conditions for the UAS flight; only the pilot in command, after the requisite preflight briefing, can make the determination of safe flight. The proposed policy of pre-approval for flights could create an artificial sense of safety for inexperienced pilots and be counterproductive to safe operation."

From a research perspective, the FEC further points out that "the nature of agricultural, public health and environmental research means that exact times and locations of flights can seldom be anticipated in advance. Weather, crop conditions, pest and disease outbreaks, environmental events, changes with aircraft, sensing and payload delivery systems are dynamic in nature and require maximum flexibility in

flight scheduling. Often the details of one flight are dependent on the findings of previous flights, reflecting the uncertainty of research in general and, in particular, research involving UAS operations.”

Ultimately, the FEC recommends that a UC policy should “simply require that all UAS operations be conducted by properly certified pilots and in accordance with all Federal, state and local regulations,” and that UC internal record keeping of flights should not unduly burden UAS operators. In addition, the FEC believes it would be beneficial to create a UC policy that is “designed to assist faculty members in the acquisition of necessary training and full compliance with FAA guidelines and regulations,” and offers suggestions on paths UC could take to ensure high safety standards, including:

1. Establishment of “SWAT teams” of existing faculty experts on campuses with extensive drone experience, to provide 1) comments, guidance and recommendations to users and administration, and 2) to coordinate with FAA, ASSURE, and UC core drone facilities with regard to current drone safety regulations and drone safety protocols.
2. Investment in core drone facilities and accompanying skilled personnel would provide faculty and students with training and technical assistance in the implementation of drone research programs through a recharge agreement.
3. The core facilities program would also have as a major responsibility to conduct training and certification programs as well as educational programs.

Full committee responses are enclosed. The Davis Division appreciates the opportunity to comment.

Sincerely,



Rachael E. Goodhue
Chair, Davis Division of the Academic Senate
Professor and Chair, Agricultural and Resource Economics

Enclosed: Davis Division Committee Responses

c: Edwin M. Arevalo, Executive Director, Davis Division of the Academic Senate
Hilary Baxter, Executive Director, Systemwide Academic Senate
Michael LaBriola, Principal Policy Analyst, Systemwide Academic Senate