

AMENDMENT TO H.R. 7273
OFFERED BY MR. WHITESIDES OF CALIFORNIA

At the end of title V, add the following:

1 **SEC. 5___ . AUTONOMOUS AERIAL SYSTEMS IN DEGRADED**
2 **OPERATING ENVIRONMENTS.**

3 (a) IN GENERAL.—The Administrator may carry out
4 research, development, and flight demonstration activities
5 to advance autonomous and semi-autonomous aerial sys-
6 tems for civil applications, such as testing in degraded op-
7 erating environments.

8 (b) ACTIVITIES.—Activities under subsection (a) may
9 include the following:

10 (1) Evaluating the performance, safety, and re-
11 liability of autonomous aerial systems under condi-
12 tions that impair sensing, navigation, or communica-
13 tions.

14 (2) Conducting flight demonstrations to assess
15 autonomy, navigation, and human-machine inter-
16 action under dynamic atmospheric and terrain condi-
17 tions.

18 (3) Reducing end-to-end latency associated with
19 autonomous sensing, onboard processing and deci-

1 sion-making, and the delivery of time-sensitive air-
2 borne data.

3 (4) Validating system performance and identi-
4 fying technical considerations relevant to the matu-
5 ration of autonomous aerial capabilities for future
6 civil use.

7 (c) TESTING.—Testing under subsection (a) may in-
8 clude controlled use in fire and smoke environments, in-
9 cluding prescribed fire, as relevant to research on oper-
10 ating environments under such subsection.

11 (d) COLLABORATION.—In carrying out activities
12 under subsection (a), the Administrator shall collaborate
13 with industry, relevant Federal departments and agencies,
14 State and local government entities, nonprofit organiza-
15 tions, and other stakeholders, as practicable and appro-
16 priate.

17 (e) RESULTS.—The Administrator shall share the re-
18 sults of activities carried out under subsection (a) with
19 United States industry to advance United States indus-
20 trial capabilities in autonomous and semi-autonomous aer-
21 ial systems for civil applications, and in sharing such re-
22 sults, the Administrator shall ensure the protection of any
23 proprietary or sensitive information.

24 (f) REPORT.—Not later than one year after the date
25 of the enactment of this Act, the Administrator shall sub-

- 1 mit to the appropriate committees of Congress a report
- 2 that includes a summary of the activities carried out under
- 3 subsection (a) and the results of such activities.

