



1
00:00:01,560 --> 00:00:04,140
The Autonomous Soaring Project has one
simple goal

2
00:00:04,140 --> 00:00:06,680
is to program a small UAV to

3
00:00:06,680 --> 00:00:08,600
soar and thermals similar to the way

4
00:00:08,600 --> 00:00:10,380
a glider pilot or birds do

5
00:00:12,840 --> 00:00:15,000
The aircraft has off-the-shelf autopilot.

6
00:00:15,500 --> 00:00:18,820
It has been reprogrammed for this project to

7
00:00:19,300 --> 00:00:21,720
automatically detect that it's in an updraft

8
00:00:21,720 --> 00:00:24,000
and then use that updraft by circling.

9
00:00:25,240 --> 00:00:27,560
During the 17 flight of this project

10
00:00:27,560 --> 00:00:30,580
we used a total of 23 updrafts

11
00:00:30,580 --> 00:00:34,340
and we had an average climb of about 500 feet.

12
00:00:34,660 --> 00:00:37,040
In a single updraft we climbed

13

00:00:37,040 --> 00:00:39,040

2700 feet or a little bit more.

14

00:00:41,360 --> 00:00:43,399

There's a wide variety of applications for this

15

00:00:43,399 --> 00:00:45,860

technology to help UAVs do things like

16

00:00:45,860 --> 00:00:47,340

forest fire detection,

17

00:00:47,960 --> 00:00:49,800

police surveillance, border patrol

18

00:00:49,800 --> 00:00:51,020

and weather monitoring.