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00:00:00,370 --> 00:00:02,080

Mike Tillema:
"We in Aircraft Operations here at Kennedy

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00:00:02,080 --> 00:00:07,290

Space Center believe in our core values of
the center. First and foremost is safety.

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00:00:07,290 --> 00:00:11,170

Safety of flight, safety of Aircraft Operations
is something we think about every day."

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00:00:12,300 --> 00:00:18,080

Wildfires are a threat to human life and property.
At a spaceport, an out-of-control wildfire

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00:00:18,080 --> 00:00:23,950

can have disastrous consequences. Those who
battle these blazes need to always be prepared.

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00:00:23,950 --> 00:00:26,630

Mike Tillema
"Aircraft Operations is called on periodically

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00:00:26,630 --> 00:00:31,770

to support our Fire Rescue teams. Our job
is to be ready to be able to provide that

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00:00:31,770 --> 00:00:33,110

support at any time."

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00:00:34,039 --> 00:00:39,350

Here at NASA's Kennedy Space Center in Florida,
firefighters stand ready to respond with teams

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00:00:39,350 --> 00:00:45,289

on the ground and in the air, using the latest
tools and technology. This includes helicopters

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00:00:45,289 --> 00:00:50,519

and aircraft that drop large buckets of water and flame retardants. These containers are

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00:00:50,519 --> 00:00:51,999

called Bambi Buckets.

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00:00:51,999 --> 00:00:56,409

Kurt Giacomelli

"The Bambi Bucket exercise is put in place

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00:00:56,409 --> 00:01:03,409

to enhance safety and to have a rapid response team in case we have a wild fire

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00:01:03,429 --> 00:01:08,870

develop here at Kennedy Space Center.

We need to have the rapid response team in

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00:01:08,870 --> 00:01:15,210

place ready to go at a moment's notice so

they can control a wildfire where ground vehicles

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00:01:15,210 --> 00:01:16,690

normally can't get to."

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00:01:16,690 --> 00:01:21,550

Training by Aircraft Operations teams perfect skills needed to ensure they are ready to

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00:01:21,550 --> 00:01:26,420

defend the spaceport from these hazards. A

dangerous situation can erupt quickly from

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00:01:26,420 --> 00:01:28,510

a simple lightning strike during dry months.

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00:01:28,510 --> 00:01:30,580

Mike Tillema

"Practice makes perfect and we train the way

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00:01:30,580 --> 00:01:34,550
we fight. And with Florida being the lightning capital of the world, it's important that

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00:01:34,550 --> 00:01:35,920
we are mission ready at all times."

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00:01:37,440 --> 00:01:43,200
A three-person helicopter crew continually practices picking up water from a nearby waterway

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00:01:43,230 --> 00:01:47,750
and dropping it on simulated targets at the center's Shuttle Landing Facility.

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00:01:47,750 --> 00:01:53,410
The training includes a crew flying over traffic cones set up as targets over the south end

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00:01:53,410 --> 00:01:58,100
of the runway at the space center's Shuttle Landing Facility and dropping water using

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00:01:58,100 --> 00:01:59,060
a Bambi Bucket.

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00:01:59,060 --> 00:02:01,910
Bill Martin
"The Bambi bucket is used for fire suppression.

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00:02:01,910 --> 00:02:06,810
It holds 324 gallons of water and it can be use specifically to drop water with pinpoint

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00:02:06,810 --> 00:02:08,310
accuracy on a fire."

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00:02:08,860 --> 00:02:14,180
The bucket is designed to help contain a fire.

For example, if firefighters on the ground

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00:02:14,180 --> 00:02:19,599
become surrounded by flames, a helicopter crew can come in at a low level and drop water

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00:02:19,599 --> 00:02:23,890
on a specific spot to open an escape route for the people on the ground.

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00:02:24,760 --> 00:02:29,200
For the recent training, the helicopter crew hovered over one of the canals surrounding

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00:02:29,200 --> 00:02:33,700
the Shuttle Landing Facility runway and lowered the Bambi Bucket into the water.

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00:02:35,940 --> 00:02:40,620
There are several ways water can be dropped on a specific target, depending on the need.

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00:02:41,240 --> 00:02:46,760
A “wet drop” requires the helicopter crew to come in and hover dropping water and wetting

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00:02:46,769 --> 00:02:50,409
down an area or a building to retard the spread of a fire.

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00:02:54,400 --> 00:02:59,240
The “spot drop” is similar, except the crew hovers at a lower altitude resulting

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00:02:59,249 --> 00:03:04,329
in the water hitting a small area, aiming to put out the blaze in a specific location.

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00:03:08,620 --> 00:03:13,680
When needing to spread water in a straight

line, a "stitch drop" is used as the helicopter

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00:03:13,680 --> 00:03:16,420

flies in a direct path over a fire.

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00:03:22,580 --> 00:03:27,639

A "hook drop" involves the helicopter flying in a tight turn and releasing the water

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00:03:27,639 --> 00:03:29,559

in a curved or arched pattern.

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00:03:32,180 --> 00:03:34,739

Bill Martin

"Through this training we maintain proficiency

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00:03:34,739 --> 00:03:38,139

and develop confidence to respond to any emergency."

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00:03:38,139 --> 00:03:43,819

While fighting a fire is the job of a helicopter crew operating a Bambi Bucket, safety is always

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00:03:43,819 --> 00:03:45,499

a paramount concern.

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00:03:47,120 --> 00:03:50,620

Kurt Giacomelli

"Aircraft operations practices a culture of safety."

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00:03:50,620 --> 00:03:55,831

"The guys that fly together, train together. This way they know each other's personalities

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00:03:55,840 --> 00:03:59,999

and it enhances safety during the operations here at Kennedy Space Center

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00:03:59,999 --> 00:04:04,859

"Aerial firefighting is an extremely dangerous operation for everyone involved. Often, the

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00:04:04,859 --> 00:04:08,919

helicopters are working in conjunction with other aircraft and firefighters on the ground."

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00:04:08,919 --> 00:04:12,529

Mike Tillema's

"NASA's Kennedy Space Center Aircraft Operations