



#trainlikemike

1
00:00:00,506 --> 00:00:15,896
[Music]

2
00:00:16,396 --> 00:00:18,236
>> Mike Hopkins: This is
astronaut Mike Hopkins

3
00:00:18,236 --> 00:00:20,726
from the Countermeasures
Training Room at NASA JSE,

4
00:00:21,156 --> 00:00:24,176
and today I'm going to talk
to you about the crown jewel

5
00:00:24,176 --> 00:00:27,766
of our countermeasure devices up
on orbit, and that's the ARED,

6
00:00:27,766 --> 00:00:30,136
which is the Advanced
Resistive Exercise Device.

7
00:00:30,596 --> 00:00:33,596
And this is ARED, and
this is what we use

8
00:00:33,596 --> 00:00:36,666
to help counteract the
effects of losing muscle mass

9
00:00:36,666 --> 00:00:40,356
and also bone loss, one
of our primary tools.

10
00:00:40,796 --> 00:00:43,326
And so actually it looks
a little bit different

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00:00:43,326 --> 00:00:45,666
than your squat rack that you
might have in your local gym,

12

00:00:46,116 --> 00:00:48,596
but it has some of the
same functions in the sense

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00:00:48,596 --> 00:00:49,896
that we do squats on this.

14

00:00:49,896 --> 00:00:52,726
We can do dead lifts, bench
press, shoulder press,

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00:00:52,726 --> 00:00:55,976
things of that nature, and
it's very effective for us,

16

00:00:56,216 --> 00:00:58,046
and it's really been
very helpful

17

00:00:58,046 --> 00:00:59,416
to increasing our fitness

18

00:00:59,416 --> 00:01:01,276
when we actually
return back to Earth.

19

00:01:01,546 --> 00:01:03,026
So how does it work?

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00:01:03,026 --> 00:01:06,586
Well, we actually have two
canisters here that have vacuum

21

00:01:06,586 --> 00:01:09,006
in them, and so we pull
against that vacuum,

22

00:01:09,006 --> 00:01:10,736
and we can just dial
in different loads

23

00:01:11,126 --> 00:01:12,426
with the handle right here.

24

00:01:12,576 --> 00:01:16,606
And we can change how
much weight we're lifting.

25

00:01:17,086 --> 00:01:19,466
Now, I'm going to give you
a little bit of a demo here

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00:01:19,466 --> 00:01:22,056
with the squat, and so some
of the first things we have

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00:01:22,056 --> 00:01:24,626
to do is make sure this bar is

28

00:01:24,626 --> 00:01:27,116
at the right height
for each individual.

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00:01:27,586 --> 00:01:33,336
And so in this case, I'm going
to need to rotate the handles,

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00:01:34,406 --> 00:01:37,646
and so each one can be
rotated individually.

31

00:01:39,386 --> 00:01:44,106
And then after that, there's
numbers along the side here,

32

00:01:44,466 --> 00:01:46,806
and so for each of our
lifts, this is some

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00:01:46,806 --> 00:01:50,016
of the stuff we do here
on the ground as we figure

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00:01:50,016 --> 00:01:53,356
out what the right
setting is for each of us.

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00:01:54,256 --> 00:01:56,866
And so I now have it set
up, and this is the plate

36

00:01:57,136 --> 00:01:58,246
that we have up in orbit.

37

00:01:58,246 --> 00:02:00,256
This black platform
that you see me standing

38

00:02:00,256 --> 00:02:02,476
on isn't actually
there on orbit.

39

00:02:03,246 --> 00:02:05,106
So then I would dial
in the right load.

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00:02:05,886 --> 00:02:07,746
I can step in.

41

00:02:07,746 --> 00:02:12,926
And now we do a squat.

42

00:02:13,516 --> 00:02:18,116
[Background Sounds]

43

00:02:18,616 --> 00:02:24,386

Once we're done, we rack
it, and we can float back,

44

00:02:25,346 --> 00:02:26,886

and that's how we use ARED.

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00:02:27,116 --> 00:02:30,246

And so, again, it's been
great training on it,