Sorry for the dramatic entrance!

Wonderguy!

You're flying!

Well, I am off of the ground for a change, and I need your help.

I did not understand something the scientist said... "The force is proportional to your acceleration"?

He's referring to Newton's Second Law: Force equals mass times acceleration or $F=ma$.

Like when you carried the safe up to the bank. You added 9 times your mass to your own, and the force on your feet and legs was 10 times your normal weight.

But you would have felt the same weight if you had been on an elevator accelerating upward at 9 times the rate of gravity, or 9 g's.
He said that none of their people had been able to use the device for very long.

I can see why. Think of a guy in the Olympics on the rings.

He mentioned the same thing!

Well, when you hover, you are pulling 1 g. But if you accelerate upward at the same rate that you fall down, it would be like the gymnast having his twin holding onto his ankles. Accelerate more than that, and it would be like having a baby elephant along for the ride.
Why not put the jets on boots, or the backpack itself... so your arms don't have to carry the weight?

He mentioned, uh... center of mass?

Right, your balance point. The effect of a force is proportional to the distance from the balance point.

Oh, yeah, like a balance scale. You can put a weight on one side one unit from the balance point. To balance it, you can put one-third of the weight 3 units away on the other side, or one-fourth the weight 4 units away.

See?

So, with jet boots, the slightest shift of your balance point would cause you to flip over.

Great googly-moogly!