things which will tend to raise heart rate, but particularly if you are up at the higher heart rate level it is a fairly accurate method. We don't mean to imply, however, that you can say that every time a man's—if you have this graph and it looks like his rate is 140, that he is doing, say, 2,200 B.t.u.'s output.

Here are the plots of some typical activities that you might com-

pare, in looking over here at B.t.u.'s per hour (fig. 33).

We feel safe in doing this, I think, as far as Apollo is concerned. We need to confirm it there, and we now need to look forward to laboratories where you can get information that will tell you more about why these things are happening, and look at some of these basic mechanisms, like, particularly, some of the basic biochemical things. Congressman Teague. Okay. Thank you, Chuck.

Any questions?

Congressman Eckhardt. How would this compare, for instance, with the sudden invigorating sort of action like a man running to make a high jump or a pole vault where he is both involved emotionally, to a certain extent, and also engaged in sudden physical activity of other than just the ordinary routine work nature?

Dr. Berry. Well, that is a small—it would compare, yes, it would

compare.

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I think the important thing to realize here is one of the things that Buzz said. If you do not tie yourself to the place where you are working, you are constantly utilizing muscles to maintain your position, and you tend to fight one muscle against the other, and he stated that he

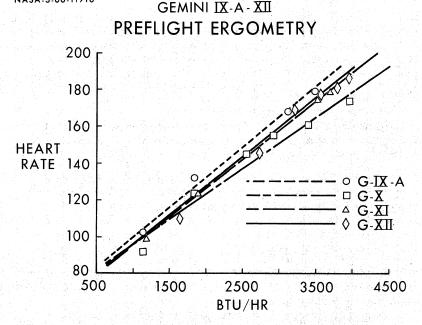


FIGURE 32