

toward getting the program into a far more rapid pace and would permit us to begin to get the new starts, the new program starts underway that are so essential if we are to have a space program that will indeed be competitive with the Soviet Union in the post-Appollo period.

Mr. WEBB. Senator Hatfield, the record has been made over a number of years that it would take between \$5½ and \$6 billion sustained over a period of time to make sure that we were developing the full range of capabilities that would assure world leadership in these fields.

Now, we have dropped backward from the \$5¼ billion level which we did attain, to \$4 billion in this year. So, it would take some time to build up to this.

Now, you do understand that as we develop these capabilities, they are used by others, such as the Weather Bureau, the Department of Defense and the Communications Satellite Corporation and others. So that budgets outside of NASA for operational use, which is also a part of the world leadership picture, are building up; they are building up to figures above \$2 billion already.

So, we have to consider the NASA program along with those others. But our job is to be in advance and prepare the way; to lay the base for proving that it is a good investment for the operational agencies.

Senator HATFIELD. I understand.

Dr. PAINE. To amplify the two statements and put them together, Senator Hatfield, our studies show that a \$4½ billion approximate level would permit new starts which would return the Nation over about a 5-year period to the \$5½ to \$6 billion level that Mr. Webb spoke of.

Senator HATFIELD. Well, then, on page 18, relating to the NERVA project, when you talk, in the second paragraph of holding the expenditures to a minimum in fiscal year 1969 and fiscal year 1970, that minimum, I assume, is inclusive of your \$7 million increase that you are recommending on page 17, but it is still at the level pretty much of the \$4 billion that you are talking about in 1969; is that correct?

Dr. PAINE. Yes.

Mr. WEBB. Let me be specific. We are proposing to the Director of the Budget that he give us an apportionment on the basis that \$7 million will be added to the interim operating plan on the NERVA budget.

Now, his decision on this will be keyed in some manner to how he believes the 1970 budget will support NERVA.

Senator HATFIELD. Well, Mr. Webb, what are the minimum expenditures that you are thinking of in terms of 1970 that you refer to on page 18, or Dr. Paine? Is this still within that realm of \$4 billion or \$4½ billion?

Mr. WEBB. The expenditures are coming down as new obligational authority is reduced. As we went up, the expenditures lagged the authority. Now, they are lagging the downward trend. And it will take something like \$3,600 million of new obligational authority to continue the projects that we already have underway with no new starts—to fly them out and complete them.