

JOHN GLENN

March 9, 1982

*all in history.*

I meet John going up in elevator on my way to Judiciary Committee. He asks if I want to go along with him to R & D hearing. No cameras; small audience (25-30), some press (8-10).

Percy is chairing - Witnesses Nelson Pewitt - Office of Science and Technology Policy; William Carey AAAS; John Deutch MIT Dean; Carl Sagan, Cornell. (Percy, Glenn, Levin are there.)

Percy is worried about A cuts

Glenn talks - says he entered long statement in CR on R & D - he reads excerpts from that speech.

Glenn tells Pewitt he tried to get Carter to put 1% of offshore oil revenue into energy research. He asked him question about cuts in R & D making us more dependent on Mideast oil. Pewitt says that that's a long term problem. Not much visible benefit so far. Deregulation produces incentives for private investment. And that relieves government of responsibility for R & D. And he ends "That's the position of the administration." Glenn says "I don't know of any area where I would disagree with you more." And he expounds on what a tragedy it is. That private investment will not take over in basic research. Goes into energy storage "one wish." "Private industry is not going to fund that kind of basic research." "Why are we cutting back on all these vital vital areas, they are crucial." He pounds table!

Pewitt - Can't support all ideas. Should support basic research and it's going up.

Glenn says 51% of R & D is defense; In Germany it's 8%, Japan 1%.

He zeroes in on NASA Lewis lab in Cleveland and programs there that are being cut back or zeroed out.

Pewitt says auto companies can do all that's necessary in internal combustion - Glenn says Lewis got some ceramic control that helps make gas turbine practicable and that shows what basic research can do. Lewis is doing it; private research isn't doing it.

Levin talks about "a very basic philosophical question that isn't going to be solved here."

He asks him whether he thinks enough money is being proposed for R & D and they spar on that. Finally, he says, "If I want to keep my job, the answer is yes" Glenn says "Let's rise above mundane matters."

Glenn comes back and asks about cutbacks on aerodynamics - we run this research for all airplane companies i.e., wind tunnels and airplanes are second to agriculture in balance of trade figures. Pewitt--no intention to shut them down, but trying to figure out what can be done by private industry.

"I'm one of those who believes we can out invent any country etc. - we are laying down our lead in aerodynamics...pennywise and pound stupid.

He admits he gets excited and asks all his questions at once. "Maybe I should ask questions in good senatorial style one by one."

Point is: he uses the same language here that he uses out on the campaign trail; and he gets just as excited here in 'the hearing room on this subject as he gets on the campaign trail.' He works off same capital and same enthusiasm in both contexts.

Glenn. "You can't run these things on a broom and bust basis... We're butchering national labs...irreplaceable personnel loss--This isn't pleasant for some of us who have had a long term interest in scientific research and what makes America tick... It will take years to recover..." "Pewitt leaves, shaking his head.

Percy - AAAS comes in - Levin leaves Glenn alone now. "R & D has done better than most areas of the budget"...especially in defense -- and he concludes that there is an effort to "enhance" basic research. But is "massive reorientation in the structure of the R & D budget" defense up 22%, now defense down 18% in 1981 - 1983 comparisons. Question has to do with civil R & D. For admin., "R & D policy is a derivative of economic policy". "If economic policy doesn't work, R & D is "stranded in the budget. We won't be able to get tooth-past back in the tube." Later, he uses term "down the drain." Good witnesses talk this way, colloquially. He thinks total of 44B is OK; problem is with 'its mix and its judgment calls." "Falls well short" of what we need to leade world in scientific research. Talks about current "disaster in education" of young in science.

Glenn asks re education - P. says it's complicated. "We aren't throwing rocks and spears." Effort for last few years is "very discouraging " on NSF science education program. "When your R & D dollars outrun your human resources, those dollars aren't going to be very productive."

Glenn has a set of 4 X 8 cards and he's going through questions produced by staff and elaborating on them. Sometimes he reads, again, from his CR statement of last week. Percy and Glenn agree with each other. Want private-public cooperation as in other countries.

Deutch--MIT was Undersecretary of Energy Department under Carter. Need for public role, inadequacy of private research (i.e., development of instrumentation, data collection.) Opposed to end of Energy Department. Fact that idea hangs over the national labs is very upsetting to people who work there. Commerce can't manage energy research. Should not separate energy and weapons research in different organizations.

1983 budget bring "decimation of some of most important Energy R & D activities." He takes it up field by field. i.e., fossil fuel (coal) research to budget figure is 95M. A few years ago, it was 1 Billion. "Shortsighted and different from every other modern technological society." "Private sector is moving in exactly the other direction." Economic conditions cause industry to tighten up and move away from research.

Glen goes into energy storage research. "I can't express how ridiculous I think this (zeroing out) is." He gesticulates when he speaks--tragic--preposterous--"it has hundreds of billions of dollars of potential" talks about storage from car better is to to large scale storage. He goes through that at some length.

Carl Sagan - talks about inter-planetary exploration as historic feat of U.S. in last 20 years. He has a long view of things - Venus has 900° temp. because it has green house effect. Raises sights to even mention life elsewhere! You need several examples to study in science--one example is not enough. Must understand other planets in order to generalize about earth." "US is backing off from this exploration now.

It's an area where we are the leaders--serves the species and adds to our prestige. One mission now planned for '80's. "Disastrous and deeply foolish" set of cutbacks is use of spacecraft that could be used, i.e., that are flying around now and will be turned off. "drop dead" OK pictures of Mars can't be read because there's no money to convert them from digital form. Other facilities will be shut down--"crisis of morale"--once scientific teams are broken up, it's nearly irreversable.

All he's talking about is 40M for this year to keep program going.

Science education "You can lose an entire generation of scientists within the time of two presidential terms--to pick a convenient number" Smiles from Glenn and others. His point is that innovative scientists have short lives.

"We are now in the position of eating the seed corn." Will get us through the winter if we eat the corn, but nothing to plant in the spring, etc.

Glenn reads again from his remarks in CR--on production of scientists.

He talks about what good is it?

He discusses VanAllen belts--serendipity - he talks about "the nature of scientific inquiry" and, again, gets passionate.