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Letters

Howie

Innovation/national security

SIR: According to Wil Lepkowski in his thoughtful article, "Innovation and national security: a complex relationship," (C&EN, July 17, page 24) assistant secretary for science and technology Jordan Baruch "seems to have a unique opportunity to contribute original thought to the innovation process, rather than simply to rethread ground covered in the past by, for example, his colleague in the Commerce Department, Michael Boretsky, and his predecessors in the job." I doubt it. Dr. Baruch is unlikely to find new or better ideas than those published just 17 months ago in a study (U.S. Technology Policy, U.S. Department of Commerce, March 1977) directed by his most recent predecessor (me) and contributed to by 90 experts in industry, academia, and government. Indeed, he'll have to turn for help to many of the same people—people who must be congratulated for their endurance and forbearance, it seems. In my opinion, beginning with the still completely timely Charpie Report Lepkowski cited, enough systematic study on innovation exists. What is lacking is an *evaluation* of the well-known policy options and some *action* on the selected ones.

Not only is the study headed by Baruch wastefully focused on obtaining more information, but the answers to the questions the White House poses, as listed by Lepkowski, are largely self-evident:

- Are new or revised government policies needed to increase industrial R&D efforts consistent with meeting national goals? —clearly "yes" with emphasis on revised;
- Are similar policies needed to increase the investment, entrepreneurial, informational, technological, or other capacities needed for the development and utilization of innovations? —is another study really needed to answer with a resounding "yes?";
- What is the optimal level and scope of direct federal participation in the innovation process? —surely removal of *direct* obstacles is what's required;
- Are significant changes needed in current policies and procedures to minimize contradicting impacts and maximize mutual support? —see second response above; and so on.

Letter to the Editor

C&EN encourages readers to contribute to this letters section. However, please keep letters reasonably short, 400 words or fewer. As we receive a heavy volume of letters, persons writing letters are limited, as a general rule, to one letter within any given six-month period.

Lepkowski, as his editors also note, has raised a deeper issue, namely the relation between innovation and national security. His panel of experts join him in seeing a connection, but it's not clear from the questions posed by the White House that it does.

Betsy Ancker-Johnson, Ph.D.
Former Assistant Secretary for Science and Technology, U.S. Department of Commerce

SIR: I read your editorial (C&EN, July 17, page 5) with only mild interest—possibly because of a long-held aversion to epistles signed anonymously; i.e., "DON'T SPIT ON THE FLOOR—The Management."

Your News Feature of the same issue, page 24, was extremely interesting, not only for what it contained, but for what it did not contain. Innovation and national security *is* a complex relationship.

I have been rereading Ortega y Gasset's "Revolt of the Masses" and de Tocqueville's "Democracy in America" for the first time in 10 years. Since I first read them in 1940-42, when the concepts they espoused were new to me, but plausible, I've reread them every once in a while to see how far we have progressed along the lines they predicted. To me, the problems we face as a nation are the result of a takeover of all functions by the mass mind. John T. Conner was the only one who alluded to this in his "the drift toward egalitarianism. . . ." Egalitarianism is diametrically opposed to innovation. The innovator must think as an elite one. H. L. Mencken would have properly and interestingly told us this today, perhaps in some such words as these: "I predicted in 1936 that the net result of more democracy in these United States (a democrat will not tolerate anyone who knows more than anybody can know—even the least of us) would be that we would elect a moron to the White House: well, by damn, we've almost made it."

The "major threats" (on pages 28-29 of your article) are mostly symptoms—results of a deficiency. None of these can be cured without correcting a basic deficiency and this was not even listed in the "basic categories to be studied"—EDUCATION! Classic basic education: which recognizes that we are not all equal in abilities, and deliberately lets minds stretch as far as possible. Those who go the distance *will eventually innovate* if placed in a nonegalitarian atmosphere and given the tools and the rewards.

If I were an innovator in government and asked to study the current problem, I would say to myself: Let's forget the mass-mind popular experts and talk to the educated minority. We've tried Keynes and Friedman and it doesn't work—let's consult Sennholz. We've listened to Dewey and the National Education Association and we've given social passes to enough egalitarian ignoramuses—let's consult the Council for Basic Education. We've tried Dulles and Kissinger and the United Nations—Let's see
Continued on page 43

Letters

Continued from page 4

what Russell Kirk and THE CENTER have to say.

As to William S. Sneath's "Lack of a common national purpose," we need a Caesar and we keep electing Neros; we need Wyatt Earps and we keep advancing Lil Abners to the front.

And so on in all categories—as long as the mass mind predominates.

To the members of President Carter's team, one can only say "Good Luck."
Shiloh, Tenn. W. H. McKinney

The gasohol proposal

SIR: Thank you for the very timely article on the pros and cons of the gasohol proposal. The solution to this nation's fuel import cost can be solved, but not necessarily in the context of a national program administered from Washington. The solution can come, rather, from many small, economically feasible increments. Here is one example (microcosmic in comparison to our present difficulties) taken from my experience.

In the 1930's and up to World War II, the Philippine economy could not support the high price of gasoline. In that period, a viable alternative was found in the production of 192-proof ethyl alcohol (at high purity in modern bubble-cap columns) from sugarcane molasses with the threat that the technology could be extended to

the whole sugar crop. When production of alcohol was a reality, the price of imported gasoline was immediately reduced to prevent its complete displacement from the motor fuel market.

In the ensuing years, the production of motor fuel alcohol from molasses came to be the most profitable agricultural enterprise in the Philippines. It was used in tractors for preparing the fields, in many many cars and trucks, for the operation of all kinds of stationary machinery, and in widespread systems of private bus lines providing low cost public transportation.

We found that 1000 Btu of alcohol could replace up to 1600 Btu of gasoline, and possibly more. This is remarkable in that, of all the hundreds of thousands of motors used, practically none (!) were originally designed to use alcohol. Motors ran cleanly, and with very much reduced vibration. In most cases maintenance costs were sharply reduced.

I see no reason why ethyl alcohol cannot be cooperatively produced by farmers from grain or waste grain sources, or sorghum, and used for all agricultural purposes. Our farms could become completely independent of imported fuel and probably have a lot left over for sale to the public.

Of course such developments would only contribute partly to combat the national deficit created by imported fuel, but it will be in such increments that the present crisis will be resolved, it is hoped, before we all go broke.

John D. Hind

*Principal Scientist, Philip Morris Inc., retired,
Naples, Fla.*

Late changes at the ACS Miami Beach meeting

ACS science counselor caucus ... Rep. Don Fuqua (D.-Fla.) will deliver the keynote address during the ACS Congressional Science Counselor Caucus at the 176th National Meeting in Miami Beach. The caucus will be held on Tuesday, Sept. 12, from 2 to 4 PM, in the LaRonde Room of the Fountainebleau Hilton Hotel.

Rep. Fuqua represents Florida's 2nd Congressional District. He is a member of the House Committee on Government Operations and the Committee on Science & Technology, of which he will be the ranking majority member upon chairman Olin Teague's retirement at the end of this year. Fuqua was a member of the Florida state legislature for four years before being elected to the House of Representatives in 1952.

The Division of Agricultural & Food Chemistry ... has changed its Divisional Business Meeting in Miami Beach during the ACS national meeting from Thursday, Sept. 14, to Wednesday, Sept. 13, to be held at about 4:45 PM. The meeting will follow the technical session in the French Room of the Fountainebleau Hilton.

INDEX TO ADVERTISERS IN THIS ISSUE

Cambridge Industries Co.	32
<i>Bernard F. Ostreicher</i>	
Celanese Chemical Company	21
<i>Catalano & Gornick, Inc.</i>	
DuPont-Intermediates	22-23
<i>N W Ayer ABH International</i>	
Ethyl Corporation	29
<i>Gaynor & Ducas Advertising</i>	
Finnigan Instruments	IFC
<i>Robert Pease & Co., Advertising</i>	
ICI Americas Inc.	OBC
<i>The Michener Co. Advertising</i>	
National Lime Association	14-15
<i>Newmark, Posner & Mitchell, Inc. Adv.</i>	
Olin Chemicals	16-17
<i>Marquardt & Roche, Inc. Advertising</i>	
Pennwalt Corporation	24
<i>Aitkin-Kynett Co., Inc.</i>	
Petrolite Corp., Tretolite Div.	15
<i>Batz-Hodgson-Neuwoehner, Inc.</i>	
James H. Rhodes & Co.	1
<i>Arthur Meyerhoff Associates Inc.</i>	
**Shell International Chemicals ...	12A
<i>Marsteller Ltd. Advertising</i>	
Veba-Chemie AG	IBC
<i>Werbeagentur Wuttke & Partner GmbH & Co.</i>	
Whatman, Inc.	44
<i>J. S. Lanza & Associates</i>	

** Companies so marked appear in the foreign regional edition only.

DIRECTORIES

Chemical Exchange	42
Classified Advertising	34-42
Equipment Mart	42
Technical Services	42

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