

Should rank of Fellow in the APS be discontinued?

The Committee on Fellowship Appeals of The American Physical Society has recommended to the Council of the APS that the distinction of Fellowship in the society be abolished.¹ Shortly a ballot on a constitutional amendment to this effect will be mailed to the membership.

The purpose of this letter is to make some points in favor of retaining the distinction.

The Committee has clearly and objectively presented the arguments for and against retaining the Fellowship classification. The important question is: How much weight should be given to the various arguments?

The first argument in favor that they list ("It is a good and appropriate honor for the Society to bestow on selected members") appears to us to be the major consideration, more important than anything else. A traditional prime function of a learned society is to recognize its especially distinguished members and identify them to the rest of society. Most of the societies that come to mind, in this country and abroad, bestow fellowship. In our opinion, this is a very valuable contribution, to physicists and to society, that the APS should make.

The arguments that the Committee quotes against awarding Fellowship may be summarized by saying that it is a small honor, inequitably and inefficiently awarded. We are among the first to agree that promotion to Fellowship has been inequitably handled. However, we believe that the best course of action is to attempt to remedy the discrepancies, rather than to eliminate altogether the rank of Fellow. Several schemes can be imagined in which this could be achieved—obviously not completely, but in a manner that is much closer to treating all members fairly—without straining available manpower. To mention one: A predetermined number of recommendations could be solicited annually from each division. (These numbers might be determined by membership population, existing percentages of Fellows, and so on.) These could be forwarded to a Fellowship Committee, which would then make the final decisions, probably again according to a numerical quota system. Those members without divisional affiliation could be judged by a separate committee, which could also examine di-

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rect nominations from department heads, prior to being passed on to the Fellowship committee. We are convinced that such a procedure would not put a strain on available manpower. Based on the number of the APS self-nominating forms returned in previous years, we believe that there is a large number of members who are presently willing and able to serve the Society, but who have not yet been enlisted into APS Committee work.

We do not mean to minimize the importance or difficulty of establishing equitable and efficient procedures. However we feel that it is a solvable problem and one that the Society should meet head-on with its characteristic enthusiasm.

In summary, we suggest that the main argument for Fellowship outweighs all the rest and that the arguments against point out the need for revised procedures.

Reference

1. S. Koenig, N. Ramsey, J. W. Stout, W. Whaling, G. H. Vineyard, *Bulletin APS*, April 1977, pages 513-4.

ROGER M. HERMAN
ROLAND H. GOOD, JR

The Pennsylvania State University
University Park, Pennsylvania

6/10/77

I am pleased to read in the May issue that a committee of the Society has recommended abolishing Fellowship as a class of membership of the Society.

Several years ago I wrote to the APS to ask that the council move to abolish the Fellowships. On rereading that letter I find that it contains some thoughts not expressed in the report of the committee and I thought it may be of interest to your readers:

June 11, 1973

Dear Professor Havens:

I wish to thank you for the notice you sent to me on April 22, informing me that I had been approved as a Fellow of the Society. It is nice to know that someone had nominated me for this honor. However after giving this situation some careful thought during the past several weeks I have decided that I must respectfully decline to accept the Fellowship. Please allow me to give you my reasons for doing so.

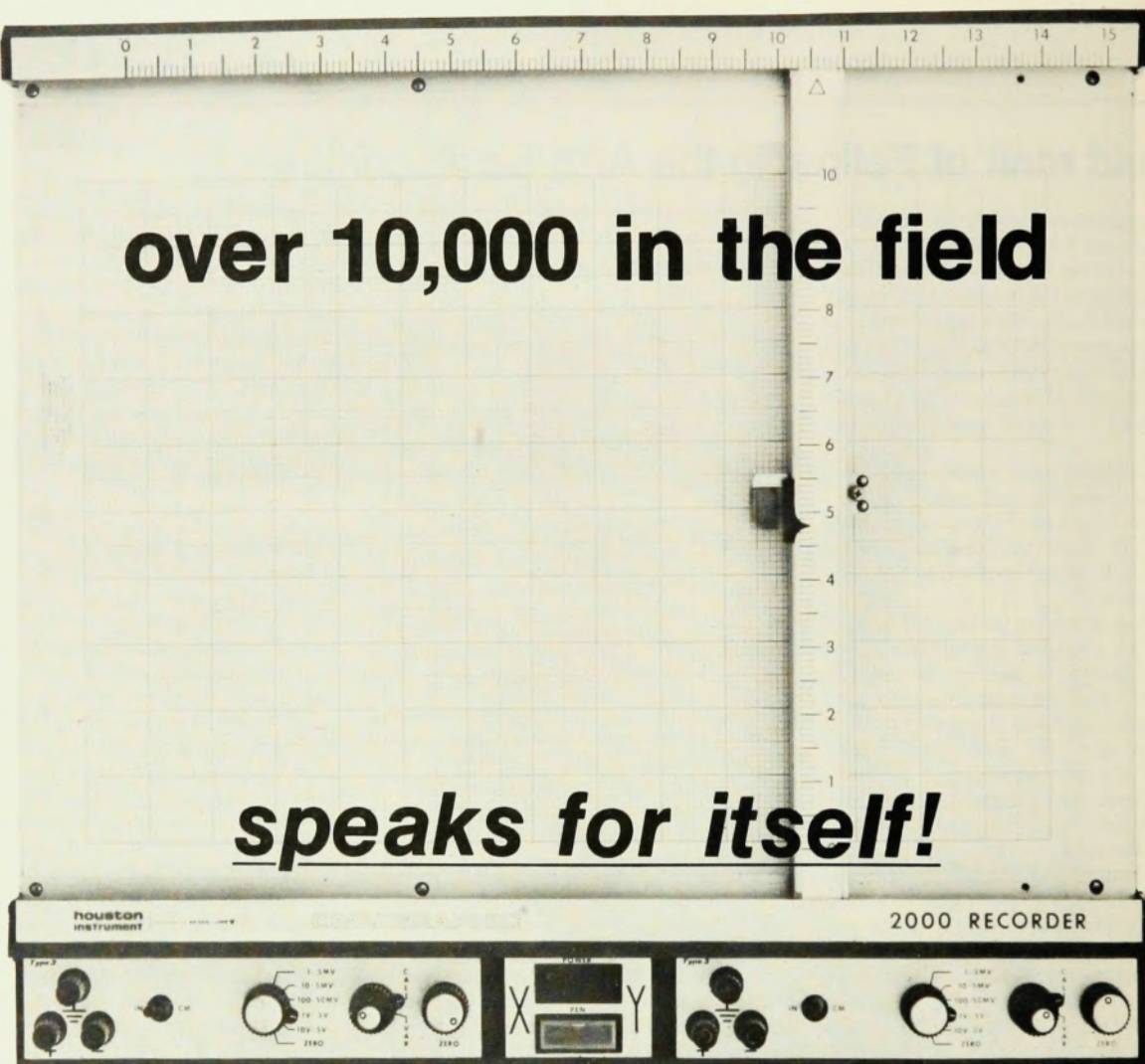
I have been a member of the Society for more than 30 years and appreciate the very important role it plays in promoting the health of our profession. Whenever the opportunity has appeared I have tried to contribute to its activities in order to support its important functions. I have never been happy with the presence of the Fellowship category and several times in the past have quietly ignored suggestions that I ask for designation as a Fellow, but now I feel that I must express my objections to the program and ask that the Council give further consideration to its elimination.

I suppose the practice of naming Fellows comes to us from the various societies in Europe. Perhaps it was entirely proper to follow this practice in that climate in the 19th century where a rigid structure was present in the general society, but the APS is an American organization which opens its membership roll to all who have an interest in physics and I do not believe it is proper then to designate first- and second-class members from among those who join and thus demonstrate their support. We recognize outstanding work by awarding prizes and by membership in such groups as the National Academy of Sciences. I

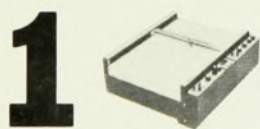
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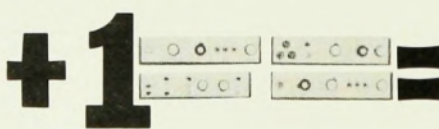
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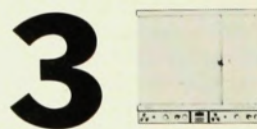
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letters

support these practices, but I see them as quite different from the Society's practice of asking all physicists for their support, but then making a public pronouncement on the qualities of those who agree to do so.

Even if I thought the Fellowship program had merit, I would find it difficult to believe that any organization could have the collected wisdom to select from 27 000 members the ten percent who are in some way the most effective physicists without doing serious injustices to many. For the Council to try to do this seems to me to be ludicrous and to waste valuable time which could be spent on more productive programs...

I am still convinced that the Society will be strengthened by abolishing the Fellowships and am pleased to learn that this may be done.

JOHN DEWIRE
Cornell University
Ithaca, N.Y.

6/2/77

... The American Association for the Advancement of Science, as you know, also bestows the rank of Fellow, and rather than have the APS abolish and withdraw this class preemptorily—as, in effect, worthless—I would advise that it consider instituting a moratorium, as did the AAAS for several years recently, upon its issuance while more stringent conditions for its award are developed and uniformity in its conferment instituted.

Frankly, it is rather a snub to those of us that saw real value in this class of membership, and to whom it betokened more than a mere triviality, to see it suddenly withdrawn; we paid higher dues in the past and would probably be willing to pay higher dues again. We felt some pride and a deepened personal relationship toward the Society and deemed the recognition also to constitute a certain responsibility. That would all be lost, just for the sake of avoiding additional effort...

ERIC SHELDON
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6/8/77

Quantum theory of politics

Every four years a transition is observed to take place in the American Political System (APS). This occurs when the politician with the highest energy (measured in electoral votes, *EV*) jumps from his political level to the highest political level in the APS. This highest political level is commonly referred to by the notation of 1600 PaA (Pennsylvania Avenue) or by the more familiar notation of *WH* (White House). The transition has

been observed to occur from one of two possible political levels. In the literature, these levels are referred to as the *DN* (Democratic Nominee) level and the *RN* (Republican Nominee) level.

From observations of this transition for the period of 1948 to 1972, T. C. Sorensen¹ has developed the following theory. He has concluded that no politician can exist in either the *DN* or *RN* level and jump to the *WH* level unless he belongs to one of three possible groups each denoted by a "magic" letter (the last letter in the name of the politician). The "magic" letters are "y," "n" and "r." Table I contains the energy values as measured in electoral votes for the transitions of 1948 to 1972 and the "magic" letter for each politician in his respective level. Also included in the table are the values for the latest transition (1976) which were not available when Sorensen postulated his theory.

Table 1. Energy Values

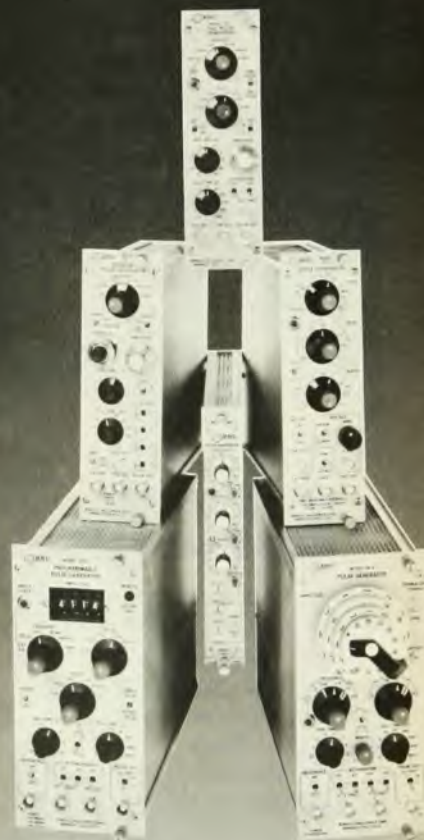
Year	DN		RN	
	Energy	"Magic" Letter	Energy	"Magic" Letter
1948	303	n	189	y
1952	89	n	442	r
1956	73	n	457	r
1960	303	y	219	n
1964	486	n	52	r
1968	191	y	302	n
1972	17	n	521	n
1976	297	r	241	d

As can be seen in Table I, in the most recent observation of this transition, the politician in the *RN* level could not be classified in one of the three groups in Sorensen's theory. The reason for this break-down of the theory is that there occurred a perturbation to the APS which made the *RN* level degenerate. B. Woodward and C. Bernstein,^{2,3} T. H. White,⁴ and others have studied this perturbation, which is referred to in the literature as Watergate. They have shown that the Nixon operator on the APS state equation produced this degeneracy of the *RN* level.

It should be noted that the perturbation could not have been predicted by the theory at the time of its development. Due to this perturbation the following corollary must be added to Sorensen's theory. A politician can exist in the *RN* level if he belongs to the group with the "magic" letter "d." The data does not lead to the conclusion that a politician with this "magic" letter will exist in the *DN* level or make the transition from the *RN* level to the *WH* level. As can be seen in Table 2, which shows the calculated transition probabilities (*TP*) for the transitions of 1948 to 1976, the transition probability for the "magic" letter "d" is zero.

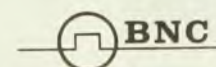
More research is needed on this phenomenon. It should be noted that Sorensen's theory and its corollary only deal

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