

January 1970

After the extraordinary Commons and IEE events on 23rd January 1970, I started giving much thought to IEE/Industry relationships.

One consideration I had at the back of my mind was the situation at Presidency level that would exist in the IEE's forthcoming 1970/71 session due to the takeover of companies by GEC. The President would be Lord Nelson, formerly of English Electric and now Chairman of GEC. The Immediate Past President would be D. Edmundson, originally AEI which was now part of GEC. One Vice President would be Eric Eastwood of Marconi, which was now a GEC company. The other Vice President would be Bob Clayton of GEC past and present. So far as just top-level Industry representation was concerned the IEE could be regarded as an outstation of GEC.

There were other relevant kinds of network connections, e.g. Eric Eastwood was Chairman of the Board of the Government Radio and Space Research Station whose Director was J.A. Saxton, Chairman of the Electronics Divisional Board.

The question of hidden links, both favourable and unfavourable, between the IEE and M.I., its parent companies Marconi and English Electric and then GEC, was something else I had experienced. Fresh in my mind was incident on 3rd November 1969 (q.v.) in which a message had been got to me at the IEE about my meeting with the GEC Chairman, Lord Nelson of Stafford, the following day.

It should also be noted that some members of the Secretariat had been recruited to the IEE from separate Companies which were now part of GEC. With the incredible amount of networking going on which did not recognise organisational boundaries this was quite important.

Another important aspect of relationships between Industry and the IEE is that many apparently independent academics consult for industrial companies, including GEC and its subordinate organisations. Academic members of IEE Boards, Committees etc. were not required to declare their remunerative associations with companies so with very few exceptions (e.g. where an academic formed a company) these linkages were hidden.

I first became aware of an adverse company attitude to the use of academics as consultants in connection with the MATE project. Richard Foxwell, then Managing Director of Wayne Kerr Ltd. and later of Marconi Instruments, gave me a list of his company's resources for submission to the Ministry of Aviation as part of my Consortium's statement of resources. As he handed me the list he pointed out in a nudge nudge wink wink manner that Professor A.L. Cullen, then of Sheffield University, was a Consultant to Wayne Kerr. At that time Alex Cullen was coming up to be Chairman of the IEE Electronics Divisional Board, of which I was a member. It was remarkable how when he was the Board Chairman he was supportive or otherwise towards me on Board matters in synchrony with the ups and downs of my battle with Marconi Instruments, in which Richard Foxwell played a prominent part.

I have no doubt whatsoever that Alex Cullen's actions within the IEE were influenced through company connections and in the interests of the companies, not the IEE. However, also doubt very much if he would have knowingly connived with the companies. There were many who would do a colleague, business acquaintance or friend a favour without asking the reason why or if they did ask would be persuaded that they would be doing me a favour by granting the request. I would have thought Alex Cullen was not in these two categories. He would probably have been subjected to indirect influence, e.g. by a conversation intended to be overheard.

Similarly I was greatly concerned by the control of one of my IEE Committees as was evident when only one member turned up - a Marconi Instruments engineer - the circumstances of events outside IEE that day making it all the more evident that this was no mere coincidence. Conversely, the meeting of the Committee soon after I had seen Sir Gordon Radley was exceptionally well attended. Again I consider arranged absence would not have been by direct request to a Committee member but indirectly e.g. by request to a more senior manager in the member's organisation to call a meeting.

I had experienced these methods of man-management at Marconi Instruments but had declined to practice them. Reluctantly I had come to recognise that I really was a trainee for very high office but I was appalled by the Total approach to the scheme and the methods being used and taught.

Another matter which concerned me about Company/IEE relationships was the status-enhancing characteristic of the IEE. This could be seen as a valuable resource for companies and individuals within them and was a two way process. I had heard that one large company (Philips) was greatly concerned that not one of its staff had made it to the top in the IEE and that the company had called a meeting to see what could be done about it. The company considered its prestige would be enhanced by one of its number achieving top status in the IEE.

Progression in the IEE was also seen by the individuals concerned and their companies as a means of enhancing the individual's status with his company and the sector in which it was operating. I had experienced this myself and indeed something of this nature had been written into my job specification at one time back at Marconi Instruments (M.I.). I had felt some disquiet about this at the time and constantly strived to distinguish between my company and my IEE functions, i.e. between my employment and my profession.

February 1970

I was dismayed when, as Chairman of the Committee on Electronics Design, I received the Minutes of the Electronics Divisional Board meeting of 10th December 1969. In my absence a paper of mine setting out proposals for the future of Electronics Design activities had been discussed and the report of it in the Minutes showed what misconceptions there had been of what I had proposed. I was absent because since my 3-year stint as a member of the Board had come to an end in late 1968 I had not been invited to attend any Board meetings as Chairman of one of its committees. A request by my Committee that I should be invited when the Committee's activities were to be discussed, a raising of the issue by the Secretariat with the Board Chairman's Advisory Committee and a letter of mine to the 1969/70 Chairman, Robert Clayton, all met with nil response. I was in effect excluded.

My letter to the Chairman, Dr. J.A. Saxton (who was also Director of the Government Radio and Space Research Station) made a strong case for representation of the Committee on the Board, which included the following:

Every Local Section which arranges a programme of meetings, generally repeats of those which have taken place elsewhere, is entitled to have a representative on the Board and even the Social Committee has one! I feel strongly that the (Electronics Design) Committee's work has been hampered by not having its Chairman on the Board and I ask you to give this matter your urgent and earnest consideration.

I was not invited to a meeting of the Electronics Divisional Board which was held a few days later but when I received the Minutes I was pleased to see that approval of the Minutes of the 10th December 1969 meeting had been made subject to an amendment to a Minute which concerned my proposals, which showed that a number of members of the Board present at the previous meeting felt quite strongly that the original Minute did not accurately reflect the positive side of what had transpired. Two days later Dr. J.A. Saxton wrote that he had only just seen my letter about representation of my committee on the Board and that he would discuss with other members of the Advisory Committee the question of my attending the next Board meeting.

March 1970

I received a letter from BV Atkinson, Secretary of the Electronics Division:-

I have been asked to extend to you a very cordial invitation to be present at the meeting of the Electronics Divisional Board being held at Savoy Place at 2.30 pm on Wednesday 11th March 1970. I enclose the relevant agenda and papers and you will see that the Professional Group structure of the Division is to be discussed.

At the Board meeting, when it got to the item on the Professional Group Structure there was a very long discussion, mainly on what form meetings should take to attract the maximum number of members and how they should be organised and publicised. At the conclusion of the discussion, the Chairman, Dr. J.A. Saxton, chose a few items for further consideration. It was only then the Chairman invited all

Professional Group Chairmen to submit a definition of the scope of their Group so that at the next meeting the Board could discuss the Group Structure.

To add insult to injury at the very end of the long meeting, under Any Other Business, the question of Design was raised by the Chairman without notice to members or myself, in the context of the paper I had produced over three months before. I was given only a very brief time to state my committee's point of view.

It was clear that though the invitation was represented as being cordial the feeling towards me of those who conducted the business of the meeting was anything but.

When the relevant minute later appeared it stated the following:

66. Design and the IEE

66.1 Reference was made to the Board's discussion on design following a memorandum from Mr. H.V. Beck, the Chairman of the Division's ad hoc Committee on Electronics Design (Minute 36 of EL(69)M5: refers) and to the report of the CEI Working Party which proposed a National Design Council (report circulated by post) and to the shortcomings of the definition of design contained in the Working Party's report.

66.2 The Chairman reported that the IEE Council had discussed the CEI Working Party's report and had agreed a definition of design, and that Mr. P. Rainger had also submitted a suggested definition.

66.3 Mr. Beck reported that the Electronics Design Committee had prepared a definition of design.

66.4 It was agreed for the Board to receive the various definitions of in a memorandum so that the matter could be discussed at a subsequent meeting.

The trouble with defining a human activity such as design, is that each person comes up with a statement which reflects their own necessarily limited experience - rather like someone who rides a bicycle and has only used buses and cars to get around might define transport as "moving from one place to another on wheeled vehicles". The Committee on Electronics Design had surveyed definitions outside electronics, the IEE and indeed engineering before coming to a conclusion about its own definition. It looked as though the process was to be repeated but on a haphazardly selective basis.

At the end of the month, James Smail, Chairman of IEE Scottish Electronics and Control Section, who I had met at the Symposium, wrote inviting me to talk to his Committee about the proposed Professional Group on Electronic Equipment Design in Edinburgh on 28th April. I took some encouragement from this but with all that had just gone on regarding the USSR people I felt I had to decline.

May 1970

I attended a meeting of the Electronics Divisional Board. I had received an Agenda and associated papers for the meeting, including one of my own, and assumed I was expected to attend. I formed an abiding impression, supported by written material which resulted, that there was wrecking conduct by the "top bench". Consideration of the Professional Group Structure was Item 9 and Design and the IEE was shown as Agenda Item 10, which referred to a memorandum from myself and another from the Secretariat.

First, the Chairman, J.A. Saxton, reversed the order of Items 9 and 10, then, just as the discussion was getting going on Item 10 R.J. Clayton weighed in with some offensive remarks. The Chairman then curtailed discussion before I was able to make most of the points I had prepared and to cap it all made a prejudicial remark just before a vote was taken. This rejected my proposal about setting up a Professional Group on Electronic Equipment Design but proposed instead that I should become associated with an ad hoc Committee on Design in a new Division. The rejection of the proposed Group under Item 10 negated the promised involvement in consideration of the Professional Group Structure under Item 9. I said to the Board was that my proposal had not been considered on its merits. The one bright spot was that in response to a question by a member of the Board it was agreed the the Committee on Electronics Design would continue in existence.

I doubt if I attended the Divisional Lecture which followed each Board meeting. On this occasion a Mr. David Attenborough and a Mr. J. Redmond were due to speak on Colour Recording Media.

The Minutes of the meeting described H.V. Beck as Attending (cf Attending by Invitation, 11 Mar meeting). Prof. J. Brown was not present.

78 DESIGN and the IEE.

78.1 The Board received a Memorandum from Mr. H.V. Beck, Chairman of the Division's Committee on Electronics Design EL(70)22

78.2 The Division received various definitions of Design EL(70)23.

78.3 Mr. H.V. Beck reviewed the activities of his Committee. He recommended a PG on Electronic Equipment Design and a Joint Professional Group on fundamental design matters be established.

78.4 The Chairman (Dr. J.A. Saxton) considered that Design was already covered in the existing (technical) PG's.

78.5 Agreed not to recommend a PG on Electronic Equipment Design, decided to ask if the Interim Board of the proposed Science, Education and Management Division if there was a need for a new PG on fundamental design matters.

78.6 Until such time as the views of the Interim Board of the proposed SEM Division were known, it was decided that the Committee on Electronics Design should refer to the Board any proposals for activities.

No mention was made of the decision of the Board that the Committee on Electronics Design should continue to function. It seems this was not to the liking of the "platform party" who as a consequence stipulated after the meeting that proposals for activities should be reported to the Board (78.6 above).

It only became fully clear to me in 1992 when I saw the Minutes of a subsequent meeting of the Chairman's Advisory Committee what contention my attendance caused to some of the 'top brass'.

* * *

Towards the end of the month I attended a meeting of Committee on Electronics Design. Only one other member turned up. BV Atkinson was in attendance. The meeting went ahead. The decision of the Board that the Committee would continue was contained in the following Minute:-

27.1 It was reported that the Electronics Divisional Board had decided not to recommend the establishment of a new Electronics Professional Group Committee concerned with "Electronic Equipment Design", in place of the present ad hoc Committee, but the Board were to invite the Interim Board of the new Division on Science Education and Management to consider the establishment of a Group Committee concerned with design fundamentals and principles. The present Committee was to continue in being until the views of the Interim Board were known.

The Committee noted that the Electronics Divisional Board had requested that proposals for meetings on design should be referred to the Board, prior to their inclusion in the programme. Then, after considering proposals for future meetings and postponing two Colloquia for the time being "pending discussions relating to the future of design within the Institution" the date for the next meeting of the Committee was confirmed as 17th September 1970.

After the Committee meeting I chaired a Lecture arranged by the Committee, on Human Factors in Management (of the innovation process) given by Professor W. Gosling of Swansea, Chairman of the Design Research Society.

* * *

Meanwhile I had written to the IEE President, D. Edmundson, about raising at the AGM on 28th May the topic of relationships between the IEE and industrial companies, particularly with regard to recent amalgamations. I pointed out that his predecessor, Professor J.M. Meek, had been so taken aback when I spoke for a few minutes at the previous AGM (saying that the scope of learned society activities should be planned) that I felt I should have given prior notice. After outlining what I wished to say I expressed the hope that it would be in order to raise the topic at the AGM.

I had not heard from the President by 23rd May and had since gone away on holiday from which I found it impracticable to journey up and back for the AGM. I wrote to this effect to the President and said I would be sending him notes on the matter of company/IEE relationships. A day or two after the AGM I received a letter from the President saying that due to himself being away on holiday he had seen my letters only in the afternoon of the 28th. He said "I am not sure whether or not the question you raise

would have been appropriate but I should certainly like to hear your point of view and welcome your offer to write to me about company/IEE relationships".

June 1970

On the 23rd June there was a meeting of the Chairman's Advisory Committee of the Electronics Division. The Minutes of the Advisory Committee were confidential – they were never published, not even to the Divisional Board. In 1992 I saw them for the first time in the IEE Archives and took notes of their contents, extracts from which are:-

Meeting of Electronics Division Advisory Committee, 23rd June 1970

Present: R.J. Clayton (Chairman), A.L. Cullen, Merriman, Saxton. BV Atkinson in attendance.

35.2 Proposed Conference on Design and Manufacture of Electronic Equipment (Scottish Section proposal for local Conference following Edinburgh Symposium of Management and Economics in Electronics Industry).

35.5 Criticism of Edinburgh Symposium. Disparaging reference to IERE. Massive discussion.

.6 Not put to Board.

40 ELECTRONICS DESIGN

40.1 Recent Divisional Board re place of Design ... SEM to be ...

40.2 Professor Brown proposed to discuss the future of Electronics Design with Mr. Beck and members of his Committee. Committee on Electronics Design to be held in abeyance until such time as Prof. Brown's discussions were concluded and the views of SEM Divisional Board are known.

40.2 Agreed that Mr. Beck should be informed of this decision.

41 Reference was made to the presence of Mr. Beck at the recent meeting of the Electronics Divisional Board without prior invitation from the Chairman and the Divisional Secretary was reminded that it was his responsibility to bring to the Chairman's notice the presence at Board meetings of any person without a right to be in attendance.

When I read these Minutes in 1992 they reminded me of Political Group meetings just before a meeting of the District Council, to hatch out manoeuvres to get the Party's way. Derogatory remarks about the other political parties and about individuals would be made in confidence which would greatly influence what would be put to the Council meeting in public but the public would never learn what was the thinking and prejudices behind the Party's stance. The IEE was an engineering institution, not a political party or a company and should be far more open in its deliberations.

I had no doubt that it was Clayton who was "gunning" for me at this meeting. Some notes on him made in 1970 were:-

1 In 1964/5, R.J. Clayton recommended by Advisory Committee to Electronics Divisional Board for election as Vice Chairman. He was not serving on the Board. His nomination went forward. RJC was brought straight onto the EDB by an external group.

2 In 1965, i.e. before GEC acquired English Electric, RJC, then in charge of GEC Applied Electronics Laboratory at Stanmore, told me (pointedly) that "one of your chaps", Dr. H.S. Arms, Technical Director of Marconi Instruments, had placed some production work with him.

3 Clayton attacked what I was saying several times on the Electronics Divisional Board.

4 Clayton was uncooperative regarding the 1968 Conference on Electronics Design - he issued an edict saying that none of his people could attend.

5 During 1968 I asked to see him on several occasions to discuss the activities of the Committee on Electronics Design.

6 In due course I got to see him about the Committee on Electronics Design in January 1969 at Hirst Research Laboratories, Wembley. It was while in the waiting room at Wembley that the "We will have fun with Enoch Powell tonight" encounter occurred). His manner throughout the meeting was thoroughly offensive and afterwards he wrote and said how much he had enjoyed our discussions.

Perhaps he was trying to get me out of the way before the new Chairman of his company, Lord Nelson of Stafford, took over as Centenary President of the IEE.

July 1970

I wrote to Professor Michael Potok, of the Royal Military College of Science, a good friend who had been my first Technical Officer at the Cavendish, telling him something of the difficulties I was experience at the IEE. In his reply he said battles are for the young – he considered his job was to pass on what he considers good to the young. He continued:-

As I see it the trouble with IEE is that it is run by managers not by engineers. Drawing them from different companies - as you suggest - will not help, they still think in the same way. We want not directors, managers, professors but practicing engineers, researchers and teachers. But it will not happen

At this time I was enquiring into masonic links in the electronics and related fields and to this end I contacted G.D. Clifford, General Secretary of IERE. He had been at the Cavendish a long time before me and I had heard about him and probably that he was a Freemason from George Crowe, a laboratory assistant to Rutherford I met from time to time in Masonic circles in Cambridge. Much to my surprise G.D. Clifford told me that George Gainsborough, General Secretary of the IEE, who I had known and had much esteemed for years, was a Freemason but of a different lodge to himself. Some time during our meeting I must have told him I was looking for a job, which had a welcome and potentially beneficial result about three months later.

August 1970

I received a letter from BV Atkinson, Secretary of the Electronics Divisional Board pointing out that I, as Chairman, had not signed copies of the Minutes of the ad hoc Committee on Electronics Design which were lodged in their files. He enclosed some Minutes which I signed and returned.

September 1970

In response to the President, D Edmundson, writing back in May 1970 that he welcomed my offer to write to him about company/IEE relationships, I sent him a short paper, *Industry and the IEE*, accompanied by a letter which contained the statement:-

There are some aspects of Institutional life which have caused and indeed still do cause me great concern and I would very much like to see them examined.

The paper ended with six practical suggestions, the need for the last of which soon became apparent:-

Consideration should be given to the effect of mergers on the machinery of appeals etc. in which one or more of the very large companies are interested parties. The IEE is in danger of reaching the unhealthy state where a truly independent committee of appeal or enquiry could not be set up or where the findings of such a committee could be suppressed.

The President replied that he was pleased to have my letter and had read my short paper with interest. He continued:

The risk you describe must be guarded against, as it must in all democratically elected bodies. It may reassure you to know I have met no instance of the sort you have in mind. Thank you again for ventilating this important matter.

I wrote again to D. Edmundson, who two days later would be handing over to his successor, Lord Nelson of Stafford, saying that his reassurance that all is democratic in the IEE only caused me more misgiving. I continued that on the very day I had received his letter an example of undemocratic processes had come to light - a meeting of the Committee on Electronics Design had not been arranged as scheduled and I had discovered this was due to a decision by the Advisory Committee of the Electronics Divisional Board which was at variance with what the Board itself had been assured. In response I received a message from the IEE Deputy Secretary saying that before he completed his term of office as President, Mr. Edmundson had asked him to thank me for my letter and to say that he does not share the misgivings I expressed.

It seemed that decisions being made by the Board Chairman's Advisory Committee and acted upon by the Secretariat unknown to the Board and even contrary to the Board's wishes were accepted as the norm.

On 17th September the Committee on Electronics Design was due to be held in the afternoon. No Agenda received. By the due date, however, I had not received an Agenda or papers. These usually arrived a few days before the meeting. I tried to get in touch in the days before the meeting and on the morning itself but failed. I phoned the receptionist at Savoy Place and asked him to see if the meeting was listed on the notice board in the entrance hall. The receptionist confirmed that it was, so I came straight away to take the meeting, thinking that my Agenda had gone astray. When I arrived the notice of the meeting had been removed from the board. Mr. E. Mills, a senior member of the Secretariat confirmed that it had been there in the morning. My Agenda had not gone astray. It had never been issued and none of the members of the Committee had arrived.

I did manage to see BV Atkinson that afternoon and among other things learned from him that the Advisory Committee of the Electronics Divisional Board had decided at its last meeting that the activities of the Electronics Design Committee should be reviewed by the Chairman Elect, Prof. J. Brown. BVA said he had assumed that the review had taken place and that is why he took no steps to organise the meeting.

Something caused me to wonder if the Advisory Committee had decided that the Committee on Electronics Design should be disbanded forthwith. Even if it had the powers to do so, it was still inexcusable that neither myself as Chairman nor the members of the Committee were notified as stipulated by the Advisory Committee.

BV Atkinson's manner and some other points he made in our conversation caused me great concern. This prompted me to put much thought and effort into finding out what had happened. In a letter I pointed out to him that the position of the Electronics Design Committee so far as the Electronics Divisional Board is concerned is that it is still in existence and asking him:-

Am I right in deducing that in effect, if not in fact, the Advisory Committee's decision had been that the Committee should be disbanded?

I received no reply. If only I had got sight of the Minutes of the Advisory Committee at the time rather than 22 years later.

On 28th September I wrote again to D. Edmundson, who two days later would be handing over to his successor, Lord Nelson of Stafford.

Referring to his letter of 16th September I said that his reassurance that all is democratic in the IEE only caused me more misgiving. I said my own experience had been very much contrary to his. On the very day I had received his letter an example of undemocratic processes had come to light - a meeting of the Committee on Electronics Design had not been arranged as scheduled and I had discovered this was due to a decision by the Advisory Committee of the Electronics Divisional Board.

I also took up a point he had made in his letter that people have to be urged to be active in the IEE. The opposite was true in my case and I sent him an extract from the letter I sent in February to Dr. J.A. Saxton about what was in effect my exclusion from the Electronics Divisional Board. I added that there was a background of industry relationships which may be responsible and this is what had prompted my note on Industry and the IEE.

October 1970

F. Jarvis Smith, IEE Deputy Secretary, wrote saying that before he completed his term of office as President, Mr. Edmundson asked him to thank me for my letter of 28th September and to say that he does not share the misgivings I expressed and that Professor John Brown, the new Chairman of the Electronics Divisional Board, would be getting in touch with me to discuss the future of the Committee on Electronics Design. A few days later Lord Nelson of Stafford gave his Inaugural Address as IEE's Centenary President. I did not attend.

There followed a meeting with John Brown at Imperial College and an exchange of letters. At the meeting Prof. Brown read out a Minute of the Advisory Committee to the effect that it had decided on 24th June that the Committee on Electronics Design should be in abeyance. That was when I first heard of it. He proposed that a working party, which would include myself, be set up by the Electronics Divisional Board to report by March 1971 on dealing with design within the Institution's Professional

Group Structure. He added that "naturally the adoption of such a recommendation would lead to the abandonment of the present ad hoc Committee". He went on to say he appreciated that I was not support of this proposal but it was essential that the Board resolves the matter as quickly as possible. I told Prof. Brown that I intended to write a letter to be read out at the next Board meeting. I requested that I be allowed to be present during the ensuing discussion. He said that unfortunately this would not be possible since the immediate question which the Board will need to answer is the mechanism by which the contents of your letter will be discussed. He concluded his last letter with:-

During our discussion you expressed the view that the position in respect of electronics design could not be divorced from other issues which you raised. I am afraid that I cannot agree with this. Further action on these other issues is a matter which you must decide.

Wednesday 21 October 1970

At the meeting of the Electronics Divisional Board on 21st October read out my letter, which was:-

Dear Professor Brown,

1 At our meeting on Thursday 15th October, you were good enough to offer your opinion that the situation with regard to the Committee on Electronics Design was very tangled and that we ought to forget past history and start back at square one. You offered to set up a Committee to examine the place of Design in the Institution and to make appropriate recommendations to the Electronics Divisional Board.

2 With respect, Mr.Chairman, I feel that past history should not be ignored but on the contrary should be very closely scrutinised. There appear to be processes at work in the Division of which the Board as a whole is not aware and which should, in my view, be brought out into the open. I feel that until the causes of the tangled situation are clearly established and any necessary remedial steps taken, there can be no confidence that any fresh proposals regarding Design would not meet the same fate.

3 At the last meeting of the Board (on May 13th) it was agreed that a Professional Group on Electronic Equipment Design should not be set up. In response to a question by a member of the Board, it was affirmed that the Committee would continue in existence, putting up proposals to the Board as necessary. I have not seen the Minute recording the Board's decisions but I assume this was so recorded.

4 Those members of the Board who were present on that occasion will know that I felt the proposal for the Professional Group had not been considered on its merits. In particular, there seemed to me to be undue pressure and bias on the part of two Officers of the Board both members of the Advisory Committee to the Board which prevented proper consideration of the proposal.

5 The matters which I feel I should bring to the attention of the Board came to a head on the 17th September. A meeting of the Committee on Electronics Design was scheduled for that date. I discovered at the last moment that the Divisional Secretary had made no arrangements for the meeting. I received no prior information that it was not to be held.

When I enquired into the reason for the "cancellation", I was informed that the Advisory Committee to the Board had decided to ask you, Mr.Chairman, to see me and two members of the Committee of my choice, regarding the future of the Committee. On the basis of this decision the Divisional Secretary had felt it unnecessary to arrange the meeting or to inform me of the situation. I wondered if the Advisory Committee to the Board had disbanded the Committee and this turned out to be substantially correct - you, Mr.Chairman, later told me that the relevant Minute of the Advisory Committee meeting (at which you were not present) read to the effect that the Committee on Electronics Design would be held in abeyance and that you, Mr.Chairman, were to see me about its future.

6 The Advisory Committee to the Board is not specifically recognised in the Regulations for the Divisions but is presumably one of those Committees which the Board is empowered to set up under Section 4(d) of the 1967 Edition. During the three years I served on the Board, I do not remember seeing a statement on its terms of reference. I did, however, gain the impression that it was intended to be Advisory in the true sense of the word.

It was not, I am sure, intended that it should take decisions on behalf of the Board which alone has the power to manage the affairs of the Division. If it had such powers it could easily become a pressure group which in effect controls the Board. It can be argued that the Advisory Committee should have powers to act on matters of urgency between Board meetings and then refer its decisions to the Board. In the case of the Committee on Electronics Design there was no such urgency. This is why the action of the Advisory Committee in placing the Committee in abeyance appears to me to be highly undemocratic - it was contrary to the decision of the Board. What was the motive in acting in this way?

7 Ironically, I received on the morning of the 17th September, a letter from the President, Mr. D. Edmundson, saying that he had not, in his experience of the IEE, met instances of undemocratic activity. This somewhat increased the warmth of my reaction when I learned how the meeting had come to be cancelled without my knowledge. The crucial point is whether there are such activities going on of which Officers of the Institution

are unaware. It has not been my personal experience but I have been told by a member of the Board of clandestine meetings by persons outside the Institution for the purpose of promoting their own choice of Officers for Professional Institutions.

8 On the question of representation of the Committee on Electronics Design on the Electronics Divisional Board, initially (from 1964 to 1967) this was by myself and one other member of the Committee, both of us elected members of the Board. Reports were made regularly to the Board and our presence on the Board enabled design topics to be introduced into the Division's programme. Comments could be made on topics relating to the Committee's work but not bearing the specific title of "Design". Since 1967, when our terms of office expired, I have endeavoured to gain access to the Board on behalf of the Committee and have been somewhat puzzled at the negative response. Representatives of Local Sections are welcomed, as they should be, as members of the Board and even the Social Committee has a representative on the Board but the Committee on Electronics Design was excluded.

It was not kept informed (for example by receiving Agenda or Minutes of Board meetings) of matters of relevance to the Committee's work.

9 I have a strong feeling that there has been undue discrimination against the Committee in the matter of representation on the Board so that it has in effect been isolated and not nearly as effective as it might have been. Thus, for example, I was not invited to be present when the Committee's proposal for the Professional Group on Electronics Equipment Design was put before the Board on 10th December 1969. I believe many adverse comments about the proposals were made on that occasion, some of which could have been cleared up if the Committee had been represented.

10 There may be elements in the relationships of the Committee to the Board of failure of communication, incorrect procedure, undemocratic action, image building, undue denial of access to the Board and behind the scenes manipulation as well as perhaps insufficient distinction between a member's IEE role and that of his external affiliations.

These are possibilities. Clearly some apply or the Committee on Electronics Design situation would not be in the tangle it so evidently is. I would very much like the Board to authorise the setting up of an impartial body of its members (or of others drawn from outside the Board?) to examine the past history of the Committee on Electronics Design with a view to determining which of these elements apply, to examine democratic processes generally in the Electronics Division and to recommend what action should be taken by the Electronics Divisional Board.

11 I very much hope that the situation with regard to the Committee on Electronics Design will not deter the Board from setting up other Committees to stimulate interest in emerging general fields or specialised topics. I personally believe a much more liberal approach should prevail so that learned society activities are quickly adapted to our rapidly changing technological environment.

12 May I say, finally, that my purpose in bringing these difficult matters before the Board is to ensure as far as possible that some undemocratic practices, whether carried out wittingly or unwittingly, are curtailed before they get out of hand, so that the Board's task may be carried out efficiently, harmoniously and with a proper regard for all points of view.

Yours sincerely,

The Minutes of the Board meeting record:-

13.6 Re the letter concerning Board procedure, the Chairman moved that a small Committee be established to look into the views Mr.Beck had expressed carried 32 FOR, 1 AGAINST, Chairman not voting and one member not being entitled to vote.

13.7 Prof.Brown proposed and Prof.Shearman seconded that Mr.G.Millington be invited to serve as Chairman unanimously agreed.

13.8 The other two members of the Committee Prof.Farvis proposed by Laver and seconded by Shearman, C.A.May proposed by J.R.Tillman and seconded by Dr.F.Horner.

13.9 Unanimous support for appointment of Prof.Farvis and C.A.May.

13.10 Terms of Reference agreed - set out in Minute.

13.11 During the discussion of Mr.Beck's letter it arose that the Advisory Committee had no formal terms of reference. It was decided that the matter should be considered at the next meeting.

Thursday 29 October 1970

Prof Brown wrote saying that the contents of my letter was communicated to the Electronics Board and a small committee is being asked to make enquiries. He went on to say:

You will shortly be receiving an invitation from this committee to present the grounds for your objections to the Board's conduct of its business.

The wording hardly did justice to my case.

Meanwhile I was trying to get answers from BV Atkinson to questions I had raised with him. I succeeded to an extent in that at length I got an apology from him for not sending out Agendas for the meeting of the Electronics Design Committee due to be held on 17th September. I told him I could not accept his apology and gave the reasons why. Later I realised he may have been a victim of the undemocratic processes to which I was drawing attention and in particular acting on assurances given to the Board and then not acting because the Advisory Committee to the Chairman of the Board took a contrary decision.

Thursday 12 November 1970

F. Jervis Smith, IEE Deputy Secretary, wrote, referring to Prof. Brown's letter of 29th October, saying a small Ad Hoc Committee consisting of Prof. WEJ Farvis, Mr .C.A. May and under the Chairmanship of Mr. G. Millington is to look into the matters I have raised. The Committee will be meeting at Savoy Place on 18th November and I am invited to meet the Committee at 1600. FJS signed himself as Secretary to the Ad Hoc Committee.

Wednesday 18 November 1970

The meeting started at 1500. Millington (Chairman), Farvis and May were present and Jervis Smith was in attendance. I joined the meeting at 1600 as invited and gave evidence.

The Minutes, received on the 24th November, recorded that after noting the Constitution (Item 1) and the Appointment and Terms of Reference (Item 2) the Committee proceeded as follows:

3. Review of Situation

At the suggestion of the Chairman, the Committee reviewed Mr.Beck's letter, and familiarised themselves with the circumstances in which the Division's Committee on Electronics Design had been set up in 1964, its subsequent activities, and the circumstances in which a meeting of the Committee, due to be held on 17th September 1970 had not been called.

4. Discussion with Mr.H.V.Beck

4.1 The Chairman and other members of the Committee welcomed Mr.Beck.

4.2 The Chairman invited Mr.Beck to develop in discussion with the Committee , any of the points made in his letter.

4.3 In a general discussion, Mr.Beck drew particular attention to three matters, namely:

(a) the circumstances in which the meeting of the Electronics Design Committee called for 17th September 1970 had not been held;

(b) the pressure exerted by the then Chairman of the Division, Dr.J.Saxton, and by Mr.R.J.Clayton when on 13th May 1970 the Divisional Board had discussed a paper by Mr.Beck on the future handling of the subject of Design;

(c) action by the Advisory Board[!] in excess of its powers.

4.4 Mr.Beck gave it as his view that the foregoing represented instances of undemocratic actions in the conduct by the Board of its affairs.

4.5 The Committee took note of Mr.Beck's representations, and the Chairman and the other members of the Committee severally expressed their opinions, namely that they did not place on these events the same interpretations as that advanced by Mr.Beck.

5. Further Action

5.1 The Chairman expressed the readiness of the Committee to look further into the specific matters detailed by Mr.Beck in 4.3 (a), (b) and (c) above, and indicated that he would prefer not to do so with Mr.Beck present.

5.2 Mr.Beck was asked if he would think this procedure undemocratic and replied that if he were to be aware of the outcome, and could meet the Committee to discuss their report when it had been prepared but before it was presented to the Divisional Board, he would have no objection to the proposed procedure.

5.3 The Chairman confirmed that he accepted Mr.Beck's suggestion and would invite him to meet the Committee again, when they had had their further meeting.

As will be seen I took exception to several points made in the above Minutes and the fact that there were a number of important omissions.

Thursday 19 November 1970

I wrote to Mr. D. Edmundson, Immediate Past President, referring to the setting up of the Ad Hoc Committee to look into "Undemocratic Processes" and asking if he would mind my circulating to members of the Committee copies of our previous correspondence. I also asked about letting his successor in Office as President (Lord Nelson of Stafford, Chairman of GEC) have copies.

Mr. Edmundson replied that he did not agree that I should circulate our previous correspondence, also that he was opposed to my suggestion that I should send him copies of our correspondence. Thus did my Freedom of Information act come to nought!

Tuesday 24 November 1970

I wrote to F. Jervis Smith:-

I think your function in relation to the Committee should be clarified. The Minutes describe you as being "In attendance". From my observation it fairly be said that you acted as a member of the Committee and moreover as member playing a leading part in influencing the course of the Committee's discussions. Thus, for example, during the course of the meeting:

I gave a number of examples:-

You strongly urged me to accept Mr. Atkinson's apology that it was due to an oversight on his part that the September 17th meeting had not been organised.

You were rather concerned when I suggested that the circumstances leading up to Mr. Atkinson's apology should be enquired into.

You queried my wish to get a statement from Mr. Atkinson in writing of the circumstances, as though it was to my discredit.

You used diversionary tactics when a point I was making to the Committee was meeting with success you will recall your introduction of the subject of low attendances at recent meetings of the Committee on Electronics Design which I challenged as irrelevant to the point I was making and I am glad to say you gave way to my remonstrations.

You suggested to the Committee that I was making a mountain out of a molehill.

I continued:-

In view of these examples, I hope you will think it reasonable that I ask - Do you regard yourself as a member of the Committee, representing the Secretariat's interests, i.e. looking after its interests? If you do, then I think the impartiality of the Committee is in question, since it is essential that the secretarial function should be unbiased and disinterested in the work it undertakes for the Committee. It would not be wrong for the Secretariat to represent its interests as long as it is clearly seen to be such and is separated from the secretarial function of the Committee. I hope you will agree in view of these remarks that your relationship to the Committee needs to be defined most carefully.

In the short time available it was not possible to describe all the events, while others which were mentioned have not been included under 4.3. I hope the Committee will take this fully into account when implementing further action under 5.1.

Item 4.5 I object most strongly to this item, as a quite premature statement purporting to represent the Committee's views.

F. Jervis Smith replied saying he was pleased to see that I had sent a copy to the Chairman of the Committee to which my observations referred and ending "As a servant of the Institution and of this Committee, I shall await the Chairman's instructions."

Around this time I made some notes on G. Millington, WEJ Farvis and F. Jervis Smith. I knew next to nothing about C.A. May – I seem to recall that he was a Post Office man working at Duke Street.

G. Millington

An engineer of the old school – honest, straightforward, an innocent, not given to manipulation and like me before I was exposed to it and indeed was the unwilling recipient of instruction in the art of it at M.I., disbelieving that it occurred. He was supportive of the Committee on Electronics Design in its early stages.

Prof. WEJ Farvis

J.R.Thompson wanted me to meet him. Interested in what I was doing. I arranged to see him at Edinburgh airport when I travelled up for Heriot Watt UNILINK interview. We had lunch at airport. I mentioned group psychological work and leadership training. He was pleasant and helpful.

I also met him at IEE and we had chat. Farvis interviewed me (with Gosling) for Chair of Electronics Design and turned me down. I noted at the time that seemed to think I should go into politics. On Science Research Council Board with Eastwood?

F Jervis Smith

I think FJS was recruited from one of the Companies which became part of GEC but if so I am not sure which.

I got in touch with him about brainwashing at an IEE Dinner. A Civil Servant lady, brought along by John Coales, was seated next to me. She had clearly been briefed and set out to get me to join CCL.

Re Ad Hoc Committee on Measurements, I experienced a complete reversal of role on the part of FJS. He asked me what line I would like him to take then set the thing up to be opposed to my view. Some of those who serve get their kicks by throwing spanners in the works. It compensates them for their lack of power.

Monday 30 November 1970

I responded to a request by BV Atkinson for Agenda items for the meeting of the Committee on Electronics Design scheduled for 10th December.

Wednesday 02 December 1970

G.Millington wrote to say the Committee members would consider the comments in my letter to FJS of 24 Nov when they discuss the accuracy of the minutes of the last meeting. He went on:

The committee has expressed no determination that you should not be present at all at their meetings, and we shall invite you to attend when we need your help to fulfil our terms of reference.

This was a rebuttal of the accuracy of one Minute. There would have been an enormously different outcome if George Millington's innate honesty had prevailed when the Committee next met.

Thursday 03 December 1970

I wrote to Prof. Farvis and C.A.May enclosing my letter of 24th November to FJS and by way of establishing my credentials regarding some of the points made in the letter to FJS I cited experience as tutor of courses on interviewing skills for senior executives, requiring careful observation and analysis of the structure of discussions. I enclosed my paper on *Industry and the IEE* and a copy of the article *Engineers, Westminster needs you too* which had awaited my return home after the meeting of the investigatory committee on 18th November. Regarding the article, I wrote that I was "intrigued to see the paragraph on 'politics' in engineering Institutions - the first published comment I have seen on the inner workings".

Friday 04 December 1970

Letter from Prof. Farvis returning my 6 page document + 3 pages of quote extracts.

I think I must have included with my 3rd December letter to Prof Farvis, a copy of the paper I had submitted to the Younger Committee on Privacy entitled "Psychological Violations of Privacy". Prof. Farvis commented that he did not share my intensity of fear, he was alarmed that I was advocating the setting up of an inquisitorial system [I was proposing legal procedures concerned with getting to the truth rather than the adversarial system]. He went on to say that the human species, like the animal species, can recognise and quickly adapt to new dangers and we are able to build up appropriate protection mechanisms.

Professor Farvis went on to refer in the university context to the slow building up of a neurosis, imagined fear, undesirable introspections. He concluded:

Life is liveable and exciting because of its light and shade: why should one concentrate on the shadows and try to remove them. One only casts another shadow while trying to clear them away. As one who can probably give you ten years seniority I would urge you to reflect carefully on the attitudes you are developing. ... I really admire the missionary motivations you have - but for Heaven's sake keep on an even keel.

Monday 07 December 1970

Letter, with papers, to Professor Farvis:

I am afraid your letter (of 4 Dec) both infuriates and saddens me.

First, I would have thought you would have known me better than to think that I "look under the bed for burglars". I think if anything I am rather too careful about drawing conclusions.

Secondly, it is not a case of fearing what may happen but probably won't. I am presenting my case as one to whom it has happened. I enclose a summary of two episodes in my career which I must ask you to keep strictly to yourself (and to return in the not too distant future). Lest you should think that the events related therein are compensating rationalisations, I have supporting documentary evidence which I would be very happy to show you.

Thirdly, Society cannot adapt to new dangers or build up appropriate protection mechanisms if it does not know what is taking place within it. I myself knew nothing of these practices until I went to M.I. I had just about heard of the behavioural sciences and I thought Machiavelli was an Italian General! If I had known the concepts and techniques being employed I would have handled the situation in a manner more advantageous to myself. What applies to me personally in this respect applies to Society at large the more that is generally known about psychological methods which invade privacy the better.

Fourthly, I cannot accept your point about inquisitorial systems. I assume that you would not feel that police enquiries into a crime are not per sé inquisitorial. Similarly with psychological assaults of above ordinary intensity. To lend point to this, how would you have dealt with the situation described in the enclosed notes.

The notes (or papers) were among those I was preparing for submission to the Home Secretary and included "While at MI ..." to "... to renew contact with them" plus Robert Maxwell M.C., M.P.

(Little did I know when I wrote the letter that three days later a disgraceful psychological assault would be made against me in the IEE).

At 1100 on Tuesday 8th December the second meeting of the Electronics Divisional Board's ad hoc Committee took place. Members were G.Millington (Chair), Prof.W.E.J.Farvis and C.A.May, F.Jervis Smith (Deputy Secretary) in attendance. I was not present so I have only the Minutes of the meeting, dated 10th December, to indicate what took place.

Minute 8 records that at the suggestion of the Chairman the Committee considered seriatim the points in my letter of 24th November to FJS and ended by saying that the Committee accepted the Minutes of the previous meeting as accurate and sufficient, subject to the substitution in 4.3(c) of "Advisory Committee to the Electronics Divisional Board" for "Advisory Board". In other words, I had got absolutely nowhere!

Minute 9 was headed Discussion with Mr.Beck and in 9.1 it was made clear that this referred to what took place at the first meeting (18th November). The remainder of the Minute was set out as follows:

9.2 As to the circumstances in which the Electronics Design Committee called for 17th September 1970 had not been held, the Committee accepted the report of the Chairman.

9.3 As to the pressure which, in Mr. Beck's view, had been improperly applied by Dr.J.Saxton and Mr.R.J.Clayton in the course of a discussion of a paper on the future handling of Design which he had presented to the Electronics Board at their meeting on 13th May 1970, the members of the Committee reported observations they had received from other members of the Board present, the consensus of which was, that the meeting had been correctly conducted, that no undue pressure had been exerted upon Mr. Beck by either of the gentlemen he had named, and that it was the democratic right and duty of a Chairman to conduct a meeting over which he presided within the bounds of order. Nevertheless, the Committee agreed to seek the observations of Dr. Saxton and of Mr. Clayton on Mr.Beck's submission, and desired the Committee Secretary to invite them.

9.4 The Committee noted that the Board of the Electronics Division were giving attention to the formulation of terms of reference for their Advisory Committee and to its constitution.

Minute 10 was headed Report to the Electronics Divisional Board and was set out as follows:

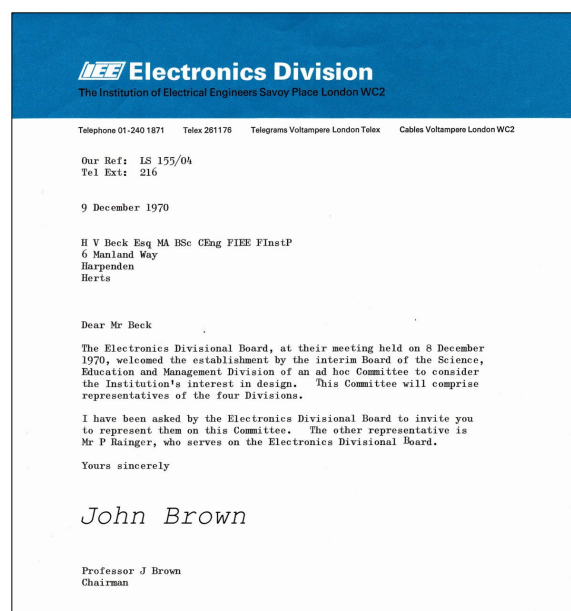
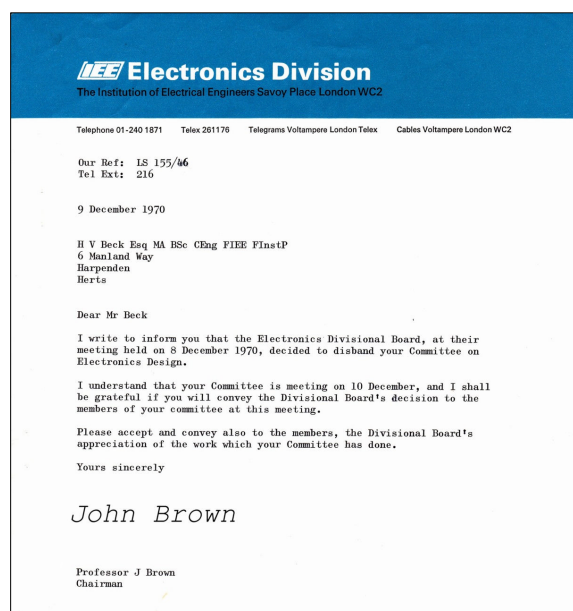
10.1 The Committee agreed on the following action:

- (a) To invite the Chairman of the Committee to draft a Report to the Board of the Electronics Division on the outcome of their studies, which should deal fully with the instances which Mr. Beck had regarded as having been undemocratic in nature.
- (b) To ask the permission of Mr. Beck to annex to their Report copies of his paper "Industry and the IEE", which he had sent to Professor Farvis and Mr. May.
- (c) To invite Mr. Beck to meet them for a discussion of the draft report before it was presented to the Electronics Divisional Board.
- (d) To send to Mr. Beck, as a matter of courtesy, a copy of the present Minutes.

Minute 11 recorded the Date and Place of Next Meeting as Friday 15th January 1971 at 11 a.m. at the Institution.

Thursday 10 December 1970

I arrived a few minutes early for the scheduled meeting of the Committee on Electronics Design. There was an envelope addressed to me at home but marked By Hand awaiting me. Inside were two letters on IEE Electronics Division notepaper, both dated 9th December 1970 and both from Professor John Brown as Chairman.



The full text of one of the letters was as follows:

I write to inform you that the Electronics Divisional Board, at their meeting held on 8 December 1970, decided to disband your Committee on Electronics Design.

I understand that your Committee is meeting on 10 December, and I shall be grateful if you will convey the Divisional Board's decision to the members of your committee at this meeting.

Please accept and convey also to the members, the Divisional Board's appreciation of the work which your Committee has done.

The full text of the other letter was:

The Electronics Divisional Board, at their meeting held on 8 December 1970, welcomed the establishment by the interim Board of the Science, Education and Management Division of an ad hoc Committee to consider the Institution's interest in design. This Committee will comprise representatives of the four Divisions.

I have been asked by the Electronics Divisional Board to invite you to represent them on this Committee. The other representative is Mr. P. Rainger, who serves on the Electronics Divisional Board.

Thus, while a Committee was still engaged in enquiring into my representations about undemocratic processes concerning the Committee on Electronics Design, the Board was asked and agreed to its closure and that decision was communicated in a manner and in circumstances which added insult to injury. It

was a prime example of an AOB technique known as Diversion – the closure letter was a NIP and the invitation to represent the Board on another Committee had the appearance of a PEP.

The Minutes of that final meeting of the Committee on Electronics Design, were issued on 13th January and received on 15th January, R.E. Young was the only other member of the Committee present and B.V. Atkinson (Divisional Secretary) and A. Walker Smith (Divisional Assistant) were in attendance. Under the circumstances the meeting took the form of a mopping up operation. I read both the letters and their contents were noted.

The final Minute 36 Conclusion of Business was the following:

36.1 At this point Mr. Beck concluded the meeting and asked that his thanks and appreciation of the assistance given to him by members of the Committee be recorded.

36.2 Mr. Beck and Mr. Young thought that it was appropriate to record some of the achievements of the Committee, as such a record would be of use to the ad hoc Committee established by the Science, Education and Management Division and it might also, if an appropriate opportunity arose, be communicated to the EEA to supplement the information conveyed to that organisation by Mr. Cranston.

When I sought clarification of the role of the Electronics Division's representatives on the ad hoc Committee of the interim SEM Board and whether they would each have access to the Electronics Divisional Board so as to ensure that the Board's views were known by both representatives. It turned out that I was being asked to serve on the Committee in an individual capacity and that only Mr. P. Rainger would have access to the Electronics Divisional Board, by virtue of his membership.

22 years later I saw in the IEE Archives the Minutes of the Electronics Divisional Board of 8th December 1970 at which the decision about the Committee on Electronics Design was taken:-

31 DESIGN and the IEE

31.1 The Interim SEM Board had decided to establish a Committee to examine (the need for a Design Committee).

31.2 It was agreed that Mr. H.V. Beck be invited to serve as one of the Board's representatives and Mr. P. Rainger accepted an invitation to serve as the second representative.

31.3 The Board unanimously agreed to disband the Division's Committee on Electronics Design.

Friday 11 December 1970

Letter from Professor Farvis given in full below:

I return herewith your typewritten sheets. Again no one else has seen them. You have certainly had some saddening experiences.

The views I expressed have not been changed. Indeed, I can see how right my assessment was. You have swung round to bite the system that has hurt you, and you are bent on reforming it. You won't be able to do either. Feeling as bitter as you do, you should turn away and apply your obvious talents in areas where you do not need to feel such resentment. That was what I meant by saying that Society has a way of protecting itself from things that are bad for it.

If what you have experienced is characteristic of the whole of industry then it will slowly destroy itself, by losing the services of people like you. A new, better kind of industrial organisation will arise from the ashes of the old one. I believe there are signs that this very thing is actually happening, now!

Wednesday 30 December 1970

I wrote to Prof John Brown, Chairman, Electronics Board about his two letters of 9th December:

I am very sorry indeed to learn of the Board's decision to disband the Committee on Electronics Design. There is a great deal about this action which savours of sharp practice, not of course on the part of the Board itself but by those responsible for placing it on the Board's Agenda.

Whether in fact it was or was not sharp practice depends on several factors. I cannot help wondering if the proposal to disband the Committee and the matters relating to the formation of the ad hoc Committee in another Division and perhaps other items considered at the meeting of the Board on the 8th December arose on a genuinely spontaneous manner or were planned as part of a system for "steering" the Board and, through the Board, myself.

Certainly there appears to have been indecent haste in putting the proposal before the Board while its own ad hoc Committee (of Enquiry) was deliberating on related matters.

The manner in which the Board's decisions were conveyed to me - without warning, on December 10th, at what was to have been a meeting of the Committee on Electronics Design, for which I had been asked to compile an Agenda only a few days before - was at the least highly discourteous and supportive of the "steering" view.

Again, if purposeful behind the scenes actions are taking place they must be judged against their real motive. It is pertinent to ask if a campaign is in hand to divert the Board's attention from the real issue of undemocratic processes.

The attitudes I have encountered and the events that have occurred since I first raised the question of undemocratic processes strongly support the view that serious malpractices are taking place and that there is a considerable danger that the Electronics Divisional Board will be prevented from receiving the full details of them by the very processes of which they have asked to be informed.

My letter continued on the topic of representing the Electronics Board on the new SEM Committee. I said I had written to the SEM Secretary for details and that from the Electronics Board end I would like to know on what basis I would be its representative, for example what arrangements would be available for collecting the views of the Board and for reporting back.

In conclusion I wrote:

At our meeting on the 15th October we touched on the subject of "steering" and I let you know my views, namely that I regard it as undemocratic and both unnecessary and undesirable in a Professional Institution. Perhaps my view of what constitutes an undemocratic process differs from yours: to obtain clarification of this, I have prepared a short document which explores some of the basic issues. I would find it most helpful if you would let me have your opinions on the questions raised.

Thursday 31 December 1970

Letter to Professor Farvis. The text is reproduced in full below:

Thank you very much for your letter of the 11th December. I imagine you do not wish to get involved in a protracted correspondence about privacy, manipulation, etc, any more than I do but there are a few points to which I feel I should respond.

In my view, your assessment expressed in your letter of the 4th December is not correct. Much of your argument was based on what you took to be imagined fear but which I hope I demonstrated to you was experienced fact. What I did not tell you was that the processes have continued in time up to the present and in all areas to which I have turned my attention. I do not think the malpractices cover the whole of industry but I am inclined to think that they are present in all areas associated with modern technology, including the I.E.E.

I have been patient for a very long time, hoping that the sector of society which employs the methods described in my paper on Privacy would lose interest or destroy itself or justify its actions but such has not been the case. I fear you take too academic a view of the protection of society. I am not prepared to starve while waiting for this to take place.

I have come to the conclusion that I must, by any legitimate means at my disposal, draw society's attention to what has taken place within it, so far as I personally am concerned, for while it remains hidden there is every incentive to keep it so and this means I shall not be able to apply my talents in reasonable freedom. This is why I have taken the action I have in the I.E.E. and will continue to do so until I achieve the desired result.

Thus it is not bitterness which motivates me nor am I biting the system that hurt me. Rather, I am seeking to expose to view a faulty sub system which is polluting my environment to such an extent that I cannot, perforce, enjoy life as I could and would like to.

I hope you will not think I am attacking you in making these points. I am only concerned that you should understand something of what lies behind some of the actions which have brought us into contact.

I thought that was quite a good note on which to end the turbulent 1970.