



INDUSTRY'S VIEWS ON MILITARY PROCUREMENT

Dr. George L. Haller

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12 December 1962

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Reporter--Grace R. O'Toole

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GENERAL STOUGHTON: Gentlemen:

The importance of today's subject is certainly most evident when we consider the attention that has been paid to it in recent years in the Nation's news media and in the Congress, and of course, obviously, by the Department of Defense itself and industry. And as we know, there has been considerable misinformation going around, such that, I guess, the term "military procurement" has become really a dirty word. So it certainly behooves us to be as well informed as possible on this subject.

We are fortunate today in having as our speaker Dr. George L. Haller from the General Electric Company, whose experience both in the academic world and in industry itself qualifies him highly to increase our knowledge in this area.

It is a great pleasure to welcome him back to the Industrial College.

Dr. Haller.

DR. HALLER: Thank you, General. Gentlemen:

I suppose that quite a few of your lecturers open their talk by saying that they are pleased to be with you. Last Monday, the day before yesterday, I fell asleep at 11:00 o'clock in the morning, not ordinarily, except for the unusual hour that this would be a blue interest to you or even to me. But I did learn two lessons at that time that I thought I would like to pass on to you. The problem I encountered when I fell asleep was that I was traveling alone at about 70 miles an hour in one of

~~these cars in which you can only hear the tick of the clock. After an exciting several seconds when I had gone over a 10-foot embankment and completely ruined a beautiful piece of machinery, I arrived at my understanding of the two lessons: One, never drive after a dose of antihistimine; and, two, always have your seat belt tight.~~

~~The only damage I sustained was a lot of bruises, mostly from the pressure of that seat belt. Now I know what it means when they say, "It only hurts when I laugh."~~

So I can say with real feeling that I am genuinely pleased to be with you this morning.

Last year I had the pleasure of talking here on military planning in industry. I mentioned that long-range planning was an idea that everybody seems to have in almost every walk of life. I mentioned at that time my personal experience with long-range planning and, while I am sure that it won't help you any, I'd like to mention it.

When my daughter was getting ready to go to college, I was at that time a Dean at Penn State, and she naturally thought that it would be a great thing to go to school there with all her friends. But her mother and I thought differently, inasmuch as we knew what stinkers all the Penn State boys were, and we didn't want to end up with one of those in the family. So we told her to look abroad. So she did and came up with the idea that maybe Sweetbriar would be the place. So we went down to Lynchburg. It's a very beautiful college. Well, to make a shorter story of it, we almost agreed on Sweetbriar, and then I thought, "The only thing worse than a Penn State

student would be one of those lazy Southerners in the family." So we said, "Let's look around." We sent her to Mount Holyoke. To show you what an expert you can get to be on long-range planning, after she was through at Mount Holyoke, she married a Penn State boy from Virginia. Let me hasten to add for you Southerners, he's a great fellow.

While I am in the Executive Office of my company, for many years I was the operating head of the Defense Electronics Division, which does about one-half the company's Defense sales. While I was never an expert on the details of military procurement, I can say with feeling that I was heavily involved in most of the good and the poor aspects of it. As you may expect, the good outweighed the poor, but the poor got all the publicity. ✓

Military procurement today has more facets than a millipede has legs. I was wondering whether I ought to add "has legs," trying to figure out what facets a millipede should have without the legs. No morning lecture can more than scratch the surface of this subject, but I can go over some of it in a way that will induce you to probe the subject more deeply, and there will always be room for improvement.

I understand that you have had an excellent piece of work to study, and I am sure that it has more details than my speech. It's this one here that was written for you, and of course you have gone over it very thoroughly, I know. But, if you haven't, I suggest that you do read it again.

The suggested subject for my talk this morning is a discussion of the reaction of private industry to the Armed Services Procurement Regulations, the Small

~~Business Act, and the Renegotiation Act. An appraisal of the buyer-seller relationship existing between government procurement agencies and industrial suppliers was also added. Naturally, the industry views which I express will be substantially influenced by my experience in our company's Defense business. But I will endeavor to reflect other views to the extent that they have been expressed in various talks, papers, and so on.~~

Inherently, however, there is bound to be substantial similarity in the views of various companies and industries, since they are all dealing with the same procurement activities and facing the same problems.

Now, with regard to the ~~Armed Services Procurement Regulations~~, I would like to make some brief comments to the act for which the Armed Services Procurement Regulations is the ~~implementing~~ document. In June of this year the National Security Industrial Association submitted to Secretary McNamara a cost-reduction study which had been prepared over a period of a year. I expect this document may be familiar to some of you. While the study was directed at cost reduction, it did involve consideration of the effect of statutes and regulations on military procurement costs, and therefore it is quite a comprehensive document. ✓

In the summary conclusions, the committee responsible for the final editing made this statement: "There was general accord that no changes are necessary in existing basic procurement regulations. Public Law 413 of the 80th Congress has proven to be a flexible, adequate, and excellent basic statute." ✓

I feel this is really quite a tribute to the authors of that piece of legislation. While only 15 years has passed since the law was enacted, the changes in the

~~complexity of military procurement have been tremendous.~~ It is difficult to make a brief ~~general statement~~ in appraisal of the ~~implementing regulation~~ since it is so tremendously voluminous and covers such a multitude of subjects. I believe it is fair to say that industry feels that the ~~regulation, generally speaking,~~ is a good document. There is, however, ~~some feeling~~ akin to that of a layman reading a lease agreement, that is to say, "The big print giveth and the small print taketh away."

~~For example, if we consider the section on patents, data, and copyrights,~~ the policy statements and ~~general instruction information~~ seem generally reasonable and objective. The clauses themselves, however, prescribed for use in contracts are much more restrictive, and the ~~implementing practices~~ even more so.

In thinking of the ~~Armed Services Procurement Regulations~~ one must also consider the ~~Army Procurement Procedures,~~ the ~~Navy Procurement Directives,~~ and the ~~Air Force Procurement Instructions,~~ as well as the subordinate regulations existing within the various subdivisions of the military departments. These subordinate documents frequently represent different interpretations and implementation of the same basic regulation within various purchasing activities.

This fact generates many problems and ~~adds to the difficulty~~ of contractors doing business with more than one procuring agency. This is particularly true of the smaller contractors, who perhaps cannot afford to maintain the sort of staff necessary to properly understand and apply these differing regulations. It would seem desirable that individual service regulations be confined to matters which have no significance in procurement ground rules to be imposed on contractors.

~~The Armed Services Procurement Regulation itself should provide the necessary policy information to permit uniform application by all the procuring agencies.~~

Now, since I am not a representative of small business, I always hesitate about commenting on the Small Business Act and small business generally, although at one time I did have a small business of my own, and I know quite a few of the problems. But I hate to comment on them, speaking for the General Electric Company, for fear that my comments might be misconstrued. On the other hand, General Electric's record of cooperation with the Department of Defense in affording small business an opportunity to compete for subcontracts which we place should speak for itself.

I believe all of industry recognizes that small business has a very important place in our Nation's economy, and that fairness requires that they be given every opportunity. Any actions, however, which tend to circumvent the normal competitive process and the experienced judgment of procurement people are not without risk.

I might mention as an aside that one of the things that we do, and a lot of the contractors, is to have small business symposiums, where we bring a lot of small-business people into a place for a day, or maybe two days, and we show them where their opportunities are. I might add as a footnote to that that such a symposium is not an allowable cost.

When I think of the Small Business Act, I am always reminded of a situation that occurred several years ago, in 1956, to be exact. Early in 1956 the Navy Purchasing Office in Washington issued an invitation for bids to furnish a little

over 600 starter generators required by the Bureau of Aeronautics. There were two responsive bids, one from Bendix at a price of \$1300, and a second from a small business at a price of approximately \$400. The Bureau was concerned that the small business was not aware of the technical complexities of the unit, since they had no previous experience with these units, whereas Bendix had manufactured them previously. Because of the doubts regarding the ability of the small business to perform, the Bureau desired to make the award to Bendix, but, since the small business was a small business, the matter was referred to the Small Business Administration, in accordance with the applicable regulations. The Small Business Administration certified the small business as competent, although in the process of the investigation it was found that their bid had had a clerical error, and instead of \$400 the price should have been \$700.

The Bureau of Aeronautics asked the Small Business Administration to re-evaluate the situation and, after further investigation, the competency of the small business was reaffirmed, and the contract was awarded to them. After several months it became apparent that they would be unable to supply a production sample for approval, and the contract had to be terminated for default.

These units were then reproceured from Bendix at their originally quoted price. The Bureau of Aeronautics then requested permission from the Comptroller General to waive assessment of the excess liability of approximately \$380,000, giving the following reasons: The small business had been diligent and had occurred considerable cost in their efforts, and the Government paid no more for the units than had been considered to be proper prices originally, and it was doubtful that the

~~excess cost could be collected since the small business net worth was only~~  
\$11,000. The Comptroller General indicated that the claim for excess cost  
could not be waived, that the small business had been given every opportunity  
to be aware of technical complexities, and had not in any way been misled by  
the Government.

~~This small business was assisted by the Small Business Act~~ in their effort to  
obtain the contract, but not many companies can afford this kind of assistance. I  
am reminded a little bit of the two small boys who were watching a lot of men  
going into a house and coming out looking fairly satisfied, and they decided that  
they would try it. They got up to the front door and knocked on it. A lady invited  
them in, asking them how much money they had. Collectively they had 25 cents.  
She asked first for \$2 and all they had was 25 cents. So she took the 25 cents  
from them, knocked their heads together, and threw them out on the front porch.  
One little boy said to the other, "You know, I don't think we could have stood \$2  
worth of that."

Sometimes these small businesses can't quite take all the help they get.

Now, I have tried to be a little brief in this Comptroller General's decision,  
but I would suggest that you might be interested in reading the full text, which does  
not include the story. The decision number is B-129249, and it is dated October 11,  
1956.

This financial catastrophe for the small business concerned suggests another  
facet of government procurement which must be of concern to small business and  
to large business alike. When small business is a subcontractor for a large prime,

they are given by the prime considerable financial help and protection. Generally, they will receive prompt payment and be in a position to keep their receivables and inventory within reasonable business limits. As a prime contractor, however, they will be subject to the same problems of collecting amounts due as any other prime contractor. For instance, our company currently has accounts receivable from the Government in excess of \$100 million, and that ain't small business. This has tremendous impact, even though our company's Defense sales are on an annual basis of over a billion dollars.

Many small businesses would not be able to weather such a situation, Even if they were able to borrow the money from the bank, interest is not a recognized allowable cost. Small business also receives much help in legal, in marketing, and in other phases of the business. As a small business man myself, my biggest job was to try to get a good subcontract from a good prime. As a matter of fact, that's how I happen to be with the General Electric Company. I not only negotiated a subcontract with them but I apparently put myself in the act as part of the contract and stayed.

Currently, an approach similar to the Small Business Set Aside Program is being used in an effort to channel military procurement to labor-surplus areas. It would seem to me that it would be more helpful from a long-range viewpoint to determine why labor-surplus areas did have their labor surplus and take steps to correct the cause, rather than using military procurement to force feed such areas.

In other words, if it is a deficiency of competency, I certainly don't want the defense of the United States to be put there. I believe that we all recognize that

the volume of military procurement is so great and in many cases the individual contracts are so large that they do have a tremendous impact on the overall national economy. On the other hand, military procurement is too important to the security of the Nation to be used for socio-economic purposes. Recently George Washington University sponsored a seminar on research and development procurement. One of the speakers, in commenting on the socio-economic aspects of procurement, made a rather intriguing remark. He said, "When you say socio-economic real fast, it sort of sounds like political."

Now to the Renegotiation Act. This act, of course, has been subject to much controversy for many years. I am sure no one questions the fact that where truly excessive profits are realized there should be some way of recapture in addition to the degree of recapture afforded by the income tax.

We have a great Governor up in New York State. Last year, but not this year, he gave us a 10 percent forgiveness in our personal income tax. I like the term. We were forgiven 10 percent of our income tax.

Excessive profits can be realized as a result of inadequate and lax procurement practices. They can be realized as a result of misinformation or lack of information. They may also be realized as the result of sheer increase in production volume, and resultant cost reductions which could not reasonably be foreseen. This latter situation was quite prevalent during the tremendous production buildup during World War II, when in many cases the increase in volume justified cost-saving methods and automated procedures which had not been generally used in industry previously.

I do not believe these conditions exist to any great extent today. Military

~~procurement people are becoming increasingly more competent and sophisticated,~~  
~~and there are many additional controls which significantly reduce the likelihood of~~  
~~windfall profits. I recognize that the General Accounting Office frequently issues~~  
~~reports to Congress citing cases where profits they consider unreasonable have~~  
~~been realized. It should be remembered, however, that in many cases the contracts~~  
~~in question were entered into a number of years prior to the institution of some of~~  
~~the current procurement practices which are much more effective in arriving at~~  
~~a fair price.~~

~~There is also one other very important thing I would like to emphasize. There~~  
~~seems to be a tendency for GAO not to comment on contracts which show less than~~  
~~reasonable profit. There is never any averaging. They go through your plant and~~  
~~they are not interested in the ones that you have lost money on. That's your own~~  
~~stupidity.~~

~~The administration of an act such as this is very difficult, since determination~~  
~~must be to a large extent subjective. I believe this is illustrated in the following.~~  
~~A decision of the Tax Court of the United States filed in October of this year cer-~~  
~~tainly raises questions regarding the desirability of an act such as this and the~~  
~~effectiveness with which it is administered. The decision related to the North Amer-~~  
~~ican Aviation and the Renegotiation Board, and the docket is 39 TC No. 19.~~

~~The Renegotiation Board issued its unilateral order determining that for fiscal~~  
~~years ending September 30, 1953 and 1954, North American Aviation received ex-~~  
~~cess profits on its renegotiable business in the amounts of \$6 million and \$14 mil-~~  
~~lion respectively, and later amended its determination to claim profits of~~

~~\$16 million and \$21.5 million. In other words, further examination showed that instead of \$6 million and \$14 million it should have been \$16 million and \$21.5 million.~~ Now, there is one little note I would like to add here. This was for business in 1953 and 1954, and it was being determined very recently. Of course the stockholders should have been paid the following year out of their dividends. So this has to be a recapture, so we have to tell the stockholders, "Please send some money back. We gave you too much."

But that isn't the main point. It is ~~certainly~~ a tremendous increase which in itself would tend to raise some questions. The Tax Court in its opinion reduced the Board's determination of \$16 million to \$4 million for 1953, and its determination of \$21.5 million to \$12.5 million. You will note that the amounts established by the Tax Court were less than those originally unilaterally determined by the Renegotiation Board before they decided to up them.

Well, so much for renegotiation. It's a very hairy problem, and we probably will never have a pure solution to it.

Now, with regard to government-industry, buyer-seller relationships, I cannot suggest any more appropriate words than buyer-seller. However, those words are not too descriptive of government-industry relationships if they are viewed in the context in which we normally think of them in our daily activities, making consumer purchases, or even the relationship between industrial buyers and sellers. The Government is in the unique position of always buying for the benefit of the people from whom they buy, since the suppliers are part of the general public, and the Government is buying with funds obtained from the general public, including the

~~suppliers. This relationship necessarily brings about problems which do not exist in the usual buyer-seller activity. The consumer, or industrial buyer, does not need to purchase from a supplier in whom he does not have confidence, nor does he have to afford such a supplier an opportunity to compete. The reason for lack of confidence may be valid or it may even be whimsical. It does not make any difference.~~

The Government, on the other hand, ~~since it is the representative of the people, which includes all the potential suppliers, must afford everyone an equal opportunity unless it can be clearly demonstrated that a potential supplier is not qualified and to purchase from him would be contrary to the best interest of the Government and of the public.~~

~~The consumer purchaser and the industrial purchaser naturally exercise their best judgment in buying at competitive prices. They are also in a position to make decisions on the basis of customer value without regard to what the supplier costs or profit might be. The Government, on the other hand, is much more restricted, particularly in military procurement, where the yardstick of customer value is almost impossible to apply. Much of the equipment being secured is of a combat nature, and we cannot use normal value concepts to measure the difference between defeat and victory in the event of a conflict.~~

This difficulty in determining value, and therefore price, does make it necessary that in much of the military procurement prices be established in relation to contractor's estimated cost. Although necessary in many cases, this does constitute an invasion of privacy not present in the usual buyer-seller relationship that

is going through all your costs.

During the past few years another relationship has grown to substantial proportions. Prior to World War II there were few problems with respect to the relationship between the Government and suppliers to the government prime contractor. The buyer-seller relationship between the prime and his subs was substantially similar to that prevailing in normal commercial business. Currently, however, the situation is radically different. The Government maintains the fiction that it is not a party to the subcontract placed by the prime, and yet effectively the Government attempts to control the conditions of the contract without assuming responsibility for the problems created between the prime contractor and the subcontractor as a result of government actions under the prime.

There is yet another practical peculiarity of Government-industry relationship, although perhaps in theory it should not exist. This difference lies in the fact that in the relationship between industrial consumer buyers and sellers the two parties may agree on a revision of price, extension of delivery, or some other contract change on the basis of equities in the situation, and even in a somewhat informal manner.

I recognize that this may not always be done in commercial buying. On the other hand, in Government-industry relationships the literal terms of the contract always hold. While there are procedures for the relief of inequities, they are not applicable in all situations, and in many cases the procedures are so burdensome and so time-consuming that they become impractical.

Perhaps the most peculiar situation in the Government-industry, buyer-seller

relationship is the fact that the seller may be bound by circumstances entirely outside the contract of which he is rather unlikely to have any knowledge. I would like to cite a case in point. In the performance of a construction contract the contractor was urged by the contracting officer to expedite the performance, which he was able to do by buying warehouse steel and working overtime. Both these actions, of course, generated increased cost, which had not been contemplated in the original contract price negotiation. The contracting officer was aware of these actions and condoned them, even though he did not issue a formal authorization.

After the completion of the contract the contractor requested a price adjustment and was then informed by the contracting officer that he could give no such relief. The contractor appealed this decision to the Armed Services Board of Contract Appeals. The Board held that the contracting officer had in fact authorized the expedited work, but the contractor still could not obtain price relief. The reason for this was that the Appropriation Act providing funds to which this work was charged included a specific prohibition against the use of any of those funds to pay for expedited effort, except with the approval of the Secretary of the department.

It is true that the contractor could have known of this limitation, since he had access to the full text of the Appropriation Act. I seriously doubt, however, that even one contractor in 100 is specifically aware of such limitations imposed on the use of funds appropriated in any one act.

I have always been brought up to believe that the old principle of "Caveat Emptor"

~~was basic to the buyer-seller relationship.~~ I don't know what the Latin is for it, but when you are dealing with the Government it is, "Let the seller beware."

I have attempted to give an appraisal of some of the peculiarities of the buyer-seller relationship between government and industry, to point up problem areas to which continual attention should be given, although admittedly I have not attempted to suggest specific ways in which the problem might be minimized. Considering the nature and magnitude of some of these peculiar problems, I believe the Government-industry relationship in the procurement area is quite good.

In these few minutes, my ~~remarks have~~ pointed to the shortcomings of military procurement on the part of the Government. I have no intention, however, of implying that industry does not deserve criticism with respect to its part in the overall area of military procurement. Some of you, I am sure, are in the procurement field currently, and others of you will undoubtedly have procurement assignments in the future. You, therefore, are likely to be in a position where you can influence the future treatment of those areas to which my remarks have been directed.

To the extent that I have been critical, I sincerely hope that the criticism will be taken constructively.

Gentlemen, that's all of my prepared remarks. I am looking forward with pleasure to our next bout in a few minutes.

MR. HILL: Are you prepared for the torpedoes, George?

DR. HALLER: Yes.

MR. HILL: Fire ahead.

~~QUESTION: Dr. Haller, previous speakers have indicated that industry as a whole would rather have fixed-price contracts than cost plus a fixed fee, particularly in areas which involve an appreciable amount of research and development. Would you care to comment on this?~~

~~DR. HALLER: Oh, I don't believe that. How on earth can you get a fixed-price contract on something which you just don't know is going to succeed or not? I mean, we have to go into things, really. We have to promise to invent things. We have to promise to conceive things. So I don't quite see how you can do this.~~

I want to say that I do have a slight introduction here that I want to tell you men. When I was here last time I gave a very brilliant speech on long-range planning, and came back to answer about a half-hour's questions on anti-trust. So, while I am perfectly willing to dig up that dead horse again, if anybody would like to, I would prefer to stick to the subject today. It was a lot of fun on both sides, I think. But, further, while I was associated with military procurement, as I told you, I had other problems in mind at the same time, like strikes and the like, all sorts of labor negotiations, and this and that, with our outfits. I was never an expert on military procurement, but, as in all organizations, we do have somebody who is an expert, and our expert is with me this morning, Mr. Wheeler, who is the man I am going to lean on if you guys get too rough on me. He is right down here in the front row.

~~Did that answer your question enough, or not? My answer is that I think it is a very difficult situation to try to get a fixed price on a contract when you don't know what you are going to do. You may know what you hope to do, but what you are going~~

to do you don't know. I might amplify that a little bit to show you the difference between military and commercial work and why you can't mix these things occasionally. In military work you get together with your customer and you both have a gleam in your eye, and you are going to go down this road and you are going to try to develop this thing. You may come out with the right answer, and you may not. It might be degraded, it might take a little longer, it might cost a little more, and so on. But, as long as you and your customer are together, this is fine, and your customer is an expert in the field.

Now, let's talk about computers for banking. You sell a computer to a banker and, if you have the same salesman or engineer that was talking to the military customer, and you go and promise a banker pie in the sky, you are in trouble. You can't get together with the banker and say, "Well now, at this point maybe we had better build the computer a little different, or add a few more memory drums, and so on." He doesn't give a damn about any of that stuff. He wants what you told him you were going to give him in the first place.

When you are developing far-out weapon systems, this is just a hope, and it's almost never realized.

QUESTION: Dr. Haller, will you give us your viewpoint or sort of a reflection of industry's reaction to the idea of incentive contracts?

DR. HALLER: I think by and large that we like incentive contracts. It certainly puts us on the spot to produce what we agree to produce and to do it in the best way, and so on. I think one of the things that we ought to do--and I really believe this--is that we ought to continue a history of performance so that when a contract

~~is done it isn't gone, and the hell with it—that's all, and we start over again. When another contract comes along we have the question: What did the guy do last time?~~

So my answer is that I am for it. I think it ought to be extended. I think that there ought to be a history of these things. This would put everybody on his toes.

~~QUESTION: This is on small business. In subcontracting my agency feels that one of the major problems with small business is getting the chance to compete. My question is this: Since the passage of the so-called Proxmire Bill, more or less 18 months ago, establishing the Government Subcontracting Program, what actions, other than the seminar that you mentioned, has your part of GE taken to afford small business an opportunity to actually quote on your requirements?~~

~~DR. HALLER: I am going to ask Peck to go into some of the details on that. We have a large program on small business. We do all sorts of things. We have lists of people. I think each department of the company has a small business administrator who looks after small business, a man whose job it is to perform in this area.~~

Go ahead, Peck, if you will.

~~MR. WHEELER: We do have a small business liaison officer for the company as a whole, and each of the individual operating departments has a small business representative. It is their job to see that the procurement people in their respective organizations do solicit small business to the greatest extent that they can.~~

Dr. Haller in his talk referred to the fact that he wasn't too hesitant to speak on the subject because we think that General Electric's record as to the percentage

of subcontracts placed with small business is about as good as anyone's. Everybody is expecting it to be better next year, but pretty soon you get to a point where it can't be better next year.

There is this specific program where each department has a small business representative. Records are kept on solicitations made of small business, and in those cases where small business was not solicited there is a record of why they were not.

Also, as Dr. Haller mentioned, we have had small business exhibits, regularly. That has been true since long before the Procurement Bill was passed. We invite small business to come in with exhibits to actually see what items there were that they could produce. It is difficult many times to second-guess just what the competence of a particular small business might be. You can go only so far in widespread solicitation without incurring administrative expense which isn't justified.

DR. HALLER: I'd like to add to this, because small business is very interesting to me. When I was a small business man my main effort in life was to work so hard that I could get to be big business, so that I would know what all the shooting was about for small business.

We feel that a great strength of our company is our small business team. In any one community you may have a big organization in the community, but really, the team that can help you in your business plant and all the rest is your satisfied group of small business men who are working with you. So, if you are in trouble with a strike or something like that, they are on your side, too, so that there is

a large pressure.

So that there are a lot of benefits in going the small-business route. Now, one of the problems with small business that some manufacturers carry on, and some big ones, is that they maintain a steady load on their own plant and allow all the fluctuations to be taken by the small business. This is really a rough deal, because small business can be going to beat the band or flat on its tail depending on just the fluctuations, where the large prime holds a steady business.

You must be careful that you don't get this sort of reputation.

**MR. WHEELER:** This is not with respect to the small business program of General Electric, but it is an odd situation that I think is perhaps thought-provoking with respect to the overall small business activity and participation. We did have a small operation in Coxsack, New York. That operation I always dubbed the "Hot Rag Department," because they made electrically heated blankets, and so forth, for various aircraft devices--that is, the Honest John Missile, for one, camera covers, and so on. It employed only 50 people, or something like that. This was in Dr. Haller's division, previously. It was strictly a small business, but it was owned by a large business.

Well, obviously, the type of equipment that they were building was the type that a small business could effectively produce. So, after some of these devices had been basically designed and built by Coxsack, then they were small business set-asides, and Coxsack could no longer compete.

That operation has been closed up, because the market situation wasn't such that it could be justified in the light of a small business set-aside program. Now

the impact of that on the General Electric Company is, however, insignificant, really. And yet, on that particular community, the impact is comparable to what it would have been had it been a small business, with respect to the management personnel, who might later be transferred and still work for the General Electric Company, and also with respect to the individuals actually working in the shop.

I think that's one that should provoke a little thought, and that's the reason I wanted to mention it.

**DR. HALLER:** This is an interesting project for me, because in my present assignment I have to look out for the small businesses of the General Electric Company, as to how we get them and how we make them grow, and so on. What we are doing is getting a few boys together who think they have a good idea, and instead of letting them resign from the company to start their own business we set them up in business and say, "Go to it." But we don't do it in the Defense area, because they can't compete with small business. They can do great stuff in the commercial area. They can take a garage somewhere and get a few people and some company backing, and away they go. In the Defense area this is dynamite. We found it out in Coxhackie. A few boys went down there and had a good idea. They developed a swell business and got their throats cut.

**QUESTION:** I would like to pursue that point a little in this respect: Would you apply your own personal experience, Doctor, to a situation we have, whereby the Armed Services Procurement Regulations provide for the qualification of a small business that has never made the product before, this in the face of the Standard Sales Act that is quite specific in saying that such a bidder has no implied

warranty, and the buyer has all the risk?

DR. HALLER: ~~The problem we get into is: How does the business get started~~ in the first place? You can't forever withhold them from doing business in a certain area. I think there is a matter of judgment that you have to put into it as to whether or not they could build this thing if they have never built it before. Whether they have built it or not before I don't think is the complete criterion of giving them the business.

~~Does this answer the question or not? I am not sure it does.~~ This is my feeling. For instance, I am sorry to say, ~~we have some of our very good people~~ leave the company and set up a little business of their own. They know more about it than we do after they've left. So they are fully qualified.

QUESTION: The services frequently put a government laboratory in the role of technical director in some of the major R&D contracts. What is the reaction of the General Electric Company to this procedure?

DR. HALLER: On this particular procedure you can't generalize. If they are good technically we feel they are good all the way through. If they are not good technically we have trouble. We don't disagree with this. We have worked with a lot of them that were good. We have worked with some that were not so good. With those that are good there is usually a very good spirit of cooperation, and we get a lot of help. Sometimes we even proselyte in hiring them. Sometimes they hire our people, too.

I don't think I can generalize, except to say that we have no problem in working with a good, technically competent man, no matter who pays him.

QUESTION: Dr. Haller, what do you think the outlook is for more cooperative research and development with our NATO allies? And what kind of production problems does this lead you into?

DR. HALLER: I still have that one around my neck. I am Chairman of the Board of our Dutch subsidiary. There are a lot of problems which are very peculiar. One is that the NATO allies--I know what I am going to say, but I don't know whether I should say it, but I will probably say it anyway--as I remember, last time I crossed out a lot of the verbatim stuff before it was released--our NATO allies are even more political than we are. We get into the situation where France must have so much and Germany must have so much to build in their own countries. I presume this is all right.

But this is one of the problems that you have. It is to try to figure out how you can have a system so that one company<sup>in</sup>/France will build a piece and one company in Italy will build a piece, and another company in The Netherlands or the Benelux countries will build a piece.

The other problem that used to exist, and that I am not sure does any more, is that they take a very, I might say, backward view on anti-trust. They tell their people to get together and to come out with the right bid, and so on, and so on. Of course this is very un-American. Yet, if we do it over there, then we are at risk here. So this is quite a dilemma.

The research and development programs are not well coordinated, because, usually, by the time we get something ready to go that is an extension of our weapon system in this country, the development has gone down so far on the road for

~~ourselves that, without thinking, perhaps, of them, by the time it is done the~~  
only thing left is the manufacturing--or trying to put, say, a Telefunken computer  
in place of a Burroughs or an IBM--this sort of thing.

These are generally the problems we have. I think that by and large we get  
extremely good work from the people who build stuff over there. We get very good  
ideas. The problem of putting the ideas together with ours is continuing.

The other problem is the security problem. This is quite nasty. Up to about  
a month ago, and I don't know whether it has changed since then, we couldn't de-  
scribe to our NATO people certain of our later things unless they asked for it.  
Of course, how they could find out enough to ask about it might be attributed to a  
leak from our company, which we couldn't afford.

So we were at a bit of an impasse. And yet, due to the gold situation, the  
Defense Department was urging us to go out and sell, but, you know, not to sell  
very hard.

QUESTION: There was one thing about the Coxhackie operation that I didn't  
quite understand. Why couldn't they compete?

DR. HALLER: This was a set-aside for small business. This was equip-  
ment which naturally could be built by small business. For some reason or other  
General Electric just didn't qualify. I think we had about 40-some employees down  
there. In the community, we had about two engineers, and the chief designer  
we got from the Delineator, or something. She was a famous dress designer who  
had gone to seed designing dresses. She was now designing these blankets to go  
around the missiles, and so on. It was a very interesting operation, really terrific.

I shudder to think of the final implication. It was rough on the community. It was rough on our people. And so on. This was one of these head-on affairs. There wasn't anything we could do about it.

QUESTION: Sir, what is the policy of General Electric in providing cost information on contracts?

MR. WHEELER: This is a subject on which I feel rather strongly. It is a little difficult to put it very briefly. We recognize certainly that in many instances there simply has to be a submission of cost information in order to negotiate the price. We recognize that. We do, however, resist giving cost information where we feel that there is a legitimate basis on which to judge the reasonableness of the price without the use of cost.

Yesterday there was a meeting of a group of National Security Industrial Association member company people at which Colonel Thiboney and Mr. Cox of the Army were present. Colonel Thiboney, as most of you probably know, is Chairman of the Armed Services Procurement Regulations Committee. This came up for some discussion there. In the course of the discussion I mentioned a case that we experienced 2 or 3 years ago. We were quoting on some small transformers. We were the sole source, because they were replacement units. They were built in the department of the company that is substantially all commercial. The units were quoted on the price which was based on standard commercial pricing curves, that is, they were priced on the basis of old amp. ratings and certain characteristics of that sort, because that's the way you had to quote in the market place. These were the same curves that were used in the market place.

So, after quoting, and it was sole source, we were asked for cost data. We did resist giving cost data. We showed them the pricing curves and explained how they were arrived at. We showed them prices of competitive commercial items of similar nature. But they still wanted something in the file. So reluctantly, we then estimated the cost. The cost had not been estimated for this job at the time the price was established. We did estimate cost, and lo and behold, the price wasn't high enough. So we increased the price and had no trouble then. We got the contract for the higher price.

Now, the next time it could go the other way. Where you have a line of components and various sizes and so forth, the market establishes a price, and your margin is not necessarily the same on each particular size of the device. So next time it could turn out that our cost would show what the Government might feel was an excessive profit.

Maybe I should have been able to say this in a little bit briefer fashion, but we do resist giving cost details if we feel there is a legitimate basis on which the contracting officer can judge the reasonableness of price. But, if there isn't we recognize that cost has to be a factor in the negotiation.

Now, Revision 12 of ASPR puts a little more emphasis on the propriety of price analysis. The emphasis is to use that where it is possible. That's a shift in emphasis from what has been true in the past.

-QUESTION: Dr. Haller, the reorganization of the Department of Army has been going through since the late part of the spring of this year. It has resulted in the procurement of all materiel being the responsibility of a single materiel

command, as opposed to the old system of being split among several different services. Can you tell me if, although this has been in business only four months, it is making it any easier to do business with the Army?

DR. HALLER: I am sorry, I can't answer that, and I don't think that Mr. Wheeler can, either. Change is progress, I guess. We have what is called the Cordiner Award. About six years ago they put in a new procedure in Schenectady, and the man responsible for it got a Cordiner award of several hundred dollars. Last month it was thrown out, and the man who was responsible for throwing it out also got a Cordiner award. So we always hope for the best. I am sorry that we don't have the details.

QUESTION: Early in your talk you mentioned patent rights. Would you compare or, maybe, contrast industry's position with regard to the origin of patent rights on patents developed on cost-type government contracts, and then patents developed by employees working on company projects?

DR. HALLER: That's a good sticky question. It comes from a good outfit, too. The question is: Why do we insist on shop rights from our employees and why aren't we willing to give up the rights complete to the Government? Let me give you a broad answer. It's not the real answer. I am sorry. I should have thought about this before. The broad answer is this: A large company could care less, really, about these patent rights, because they have the resources to exploit these things by means of superior marketing, more money to go into the item quickly, to go to market quickly, and so on. But really, the guy that you are hitting when you don't give him a right under a government contract is the small business man. He

~~doesn't have this ability. He's the buy that needs the patent.~~

~~Now, this isn't the answer to your question, but it is around the side of it.~~

~~I think, really, that you should ask your small business man when he is up here sometime, what his views are on this.~~

QUESTION: Dr. Haller, you mentioned the large accounts receivable, \$100 million on a billion dollars worth of business. This is somewhat of a shock. It probably has a lot of good features behind it. What I wonder is how much of this business is DOD business. In other words, you in being brought along incrementally on this, most of this cash receivable is really not out-of-pocket GE expense. I am a little bit curious about what that statistic means.

DR. HALLER: If you are implying that that is equal to our profit, it ain't. That's 10 percent. It would be a very good trick to get up to that. One of the basic problems is the definitization of contracts on which there is a hold-back until the contract is definitized. I think this is one of the big problems.

The other problem is the problem of really going out on a limb without contract coverage. You are told to go ahead, and go ahead, and "Gee, this is fine," and so on, but "We're broke. We'd be glad to help you out when funds are appropriated." You would be amazed at the number of contracts that are in this situation from time to time.

QUESTION: Do you release to the Government information concerning your subcontractors? The reason I ask this question is that when the military buys an end item we are interested in buying repair parts. To enable them to go on a competitive basis on spare parts, do they have this information from you people?

DR. HALLER: I think they do. Yes, they have complete information. One of the subsidiary problems to this, however, is that now, in this spare-parts thing, many of the manufacturers don't have drawings any more. They've got punch tapes. We have magnetic tapes. We put the tape on the machine and, zing, zing--out come billions of these little things. We don't have any drawings.

But in the order it says, "You produce the drawings." So what you do after the contract is all over is spend a couple hundred thousand dollars whipping up drawings that never will be used, and will serve no purpose whatsoever at all. But there they are.

Anybody can build these things using the newer methods. This is something that ought to be studied a little better in the procurement procedures. Industry is going further and further from drawings, and even the engineering drawings are now done on these modules, you know, and they are whipped into a machine and that's the end of it. The drawing is in a tape file somewhere.

But this is not satisfactory for most government procurement. They want a drawing that they can see.

QUESTION: Do you feel that there is any risk to a contract in undertaking military business when the contractor also has a big civilian business? In other words, do you feel that falling flat on your face in a military R&D contract might affect your civilian business?

DR. HALLER: Oh, certainly. One of the things that you get out of a military contract that gives you a reason for taking military contracts is aiding in the defense effort, which is good. It creates a good company image. When our

company developed the guidance system that put the satellite in orbit, and Glenn said, "I'm good for seven rounds," and so on, and when he said he was right in the keyhole, that was a GE keyhole, and we didn't let the public forget it. It was damn good.

Now, if he----gee, when I think of that, I break out in cold sweat. A month before that keyhole disappeared on that Venus shot. I don't know who was responsible, but it was our keyhole, and it was a pretty miserable situation. We are all still trying to analyze it to see what went wrong. But the next shot after that was Glenn. Now, that morning, when that thing went up, the Chief of that department, the Chief Engineer, and I sat holding hands, just hoping that everything was going to go right. It really did and it has ever since. We had one failure out of 106 or something like that, but it was the one just preceding Glenn, and we couldn't analyze it.

The answer is, yes, you can't fall on your face and do a good job for the consuming public. I think this is a very important thing. RCA certainly makes quite a bit of its successes in the good work that they do for the services.

I thought you might be asking the question about risk--why should we ask for any profit when we have no risk? I was going to ask you to look in the Wall Street Journal today and see about RCA's laying off 400 or 500 engineers, and ask whether that isn't a risk to the company, because of the cancellation of a program that may or may not have anything to do with RCA's business. I think it was the Sink Program that was cancelled. This had nothing to do, as I understand it, with RCA's ability to perform/the contract, but rather/a shift in the military emphasis. This is a

dreadful risk to a company. ~~When you assemble a group of engineers and you have~~  
to let 400 or 500 go, they are going to look at you pretty peculiarly before they  
will come back to work for you.

So the companies do have a risk in military procurement. A lot of people say,  
"Hell, you shouldn't ask for any profit, because there is no risk, and you get paid,"  
and so on.

**QUESTION:** You mentioned profits earlier in your speech. What do you in  
speaking for industry consider a reasonable rate of profit? Should this rate be  
tied to sales or capital investment, inasmuch as the Government has considerable  
capital investment in the defense industry?

**DR. HALLER:** Let me tell you about that. What is a reasonable profit I don't  
know. I had a very interesting experience in a general's office, who shall be name-  
less at the moment. He was a terrific fellow and a good friend of mine. He had a  
young colonel there, and we were negotiating profit. I was asking at that time for  
7 percent on sales and this young colonel came in, and he made a brilliant analysis  
to the general and to me. He had analyzed our company operating statements and  
last year we had made 6.3 percent on sales throughout the total company. He asked  
why I didn't settle for that, and why I was trying to chisel them out of .7 percent.  
I said, "Colonel, I accept your offer." The general said, "Colonel, get out of this  
room." The thing he had failed to see, and that the general certainly saw, was that  
the 6 percent that we make overall from our consumer product, and so on, was after  
taxes, and the 7 percent that I wanted was before taxes. So I was very willing to  
accept that.

~~Now, this business of the return on investment is something that is away~~  
behind the times. I went into one operating department that had some government  
money--this was many years ago--and their return on investment was infinite,  
because they owed the Government more money than they had invested in the bus-  
iness. But the Government soon rectified this. You don't have these situations  
any more, where you have great Government investment. You are supposed to  
own your own plant. You are supposed to carry your own receivables. Our return  
on investment is less than it is on commercial business.

It didn't use to be. In fact, this is one of the reasons why government business  
used to be pretty good, because you could, while you got a very low rate of return  
on sales--and after taxes this would run around 2 to 2.5 percent--get a pretty high  
return on investment. But you don't any more. You really don't. You have to buy  
your own plant.

I think it was a couple years ago when the Government started getting rid of  
plants and you had to buy them and provide all your own facilities. In Philadelphia  
when I was in charge of the division, we built a plant there for government work,  
and we have our own company money in that plant--a little better than \$30 million,  
in the last couple years. The return on investment is horrible.

QUESTION: Dr. Haller, in the area of general research and engineering, each  
year or periodically the services have negotiation with respect to rates on what  
we have accepted before. I have a two-part question. One, what is industry's  
reaction to the general research and engineering rate of negotiation? Second,  
how much lead time in the services in this area of general research do the GE

people or industry as a whole provide?

DR. HALLER: Well, I'll say two things rather bluntly on this. It used to be that there was a certain amount that was negotiated by an amount. Then later it was cut down to a percentage. I think right now it is negotiated at a certain percentage of the work that you do on the thing. I consider that merely a chisel point on profit. You have to do this anyway, and if they cut out some money here, it's just cutting the profits down a little bit.

With regard to the research and development, you can't allow a company to go hog wild on this. You can't allow them to spend 100 percent of their sales on research and development, because, first of all, they couldn't do a good job, and so on. So there has to be some judgment played by the military on the amount of research and development work they do, and this is negotiation, and I am sure that the military will always feel that there is a little less and the company will feel there is a little more.

That's a normal trading negotiating situation. But, in the case of companies that do their own research and development for the consumer business, this includes manufacturing research and all the rest, and usually the Government gets more than it pays for in that they do have access and they do get the benefit of that consumer research.

A lot of people say, "Sure, you get benefits from the government business you do into your consumer work." But it is my general opinion that you get more benefit the other way from manufacturing procedures and materials and that sort of research.

MR. HILL: George, - I thank you on behalf of Admiral Rose and the students,  
and you, too, Mr. Wheeler, for your valuable contribution and presentation by  
your wonderful company. We hope you will both come back.

DR. HALLER: Thank you.