

April 17, 1969

Dear Faculty Member:

Enclosed you will find a paper that discusses pertinent aspects relating to the very complex questions that have been raised by the present sit-in at the Applied Electronics Laboratory. As a member of the Systems Techniques Laboratory who has been engaged in classified research and who, on the other hand, is very disturbed about our present set of national priorities, I have for quite some time attempted to answer some of the questions involved.

As a concerned member of the university community, I and the undersigned members of our laboratory, would urge you to acquaint yourself with the problems and answers presented in this paper.

Sincerely,



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enclosure

A CASE FOR CLASSIFIED RESEARCH

Will End of Classified University Research Help End Wars?

In talking to the students presently participating in the sit-in at the AEL building, I learned that they generally are aware of the fact that coercive tactics are being employed. They feel, however, that these tactics are justified by the morality of their demand to stop classified and military research. The argument is made that:

1. Work carried out under classified contracts is immoral
2. Military research is immoral and universities should not be involved in it
3. Refusal to carry out classified and military research by Stanford and other universities will force the military establishment to end the hot war in Vietnam as well as the cold war being waged against Russia and the Chinese.

Certainly, the goals of ending the war in Vietnam and a reduction in our military efforts for the benefit of our social problems are eminently desirable and credit is due to concerned students and faculty, inside and outside the SDS, April 3 Coalition, and Resistance, for working towards these goals. However, while I am in full agreement with the goal of rearranging our national priorities away from military efforts towards humanitarian purposes, I believe it should be obvious that the above three assertions are simply not correct and particularly that the demand for stopping work on classified contracts at Stanford will not further the goal of reducing armed conflict in the world.

I shall examine the three assertions individually.

1. Is Work Carried out Under Classified Contracts Immoral?

Research contracts are designated as "classified" if the contract work either (1) involves classified background information (e.g., the knowledge of the classified launch date of a space shot or, perhaps, some unclassified material that is part of a classified report), or (2) has classified applications, or (3) if the work itself is of classified nature. It is interesting to note that classified nature does not necessarily imply an immediate military potential (as has often been

pointed out there is absolutely nothing that has not also a military application, e.g., bread can be used to feed destructive soldiers). For instance, a fiber for making cloth of greatly superior quality than presently possible, even if invented by a private citizen in his own home, can be designated as classified by the government of the grounds the knowledge of such an invention in the hands of an enemy could destroy the balance of economic and military power. The vast majority of classified contracts at the Systems Techniques Laboratory falls into the first category described above and most of the work done under them is unclassified as are the resulting reports. Some research involves concepts or devices that are equally well applicable to military or humanitarian purposes. A typical example are the computer pattern recognizers developed by the Systems Techniques Laboratory (STL); such a device can be trained to recognize electrical waveforms whether the waveforms originate from a human electrocardiogram or from a scanning radar. Since funds for this research were only available from a military agency interested in radar pattern recognition but not from any organization interested in medical research, the project was carried out under a classified military contract. Such a project will normally result in two reports, an unclassified report that describes the work and its medical applications and a classified supplement that deals with the radar application.

As pointed out so far, the large majority of the work done under classified contracts in STL is unclassified (I would assume that the situation is similar in other Stanford departments although I cannot speak for them since I am not sufficiently familiar with their programs). However, there is some work being done that is classified because it is definitely military in nature. Such research would be a project involving the electronic jamming of radar systems. I think I can safely assume that the majority of the concerned university community would only question the morality of this last category of research which is primarily military in nature. I shall assume for the purpose of argument (I will come back to this question in Item 2) that it is decided

that involvement in this type of military research is immoral and that we do not want to carry it out. The demand to terminate all classified contracts to avoid the possibility of becoming engaged in some military research is certainly not reasonable in light of the fact that funds for research and student support are difficult to obtain and that it is certainly not impossible to separate "moral" classified contracts from "immoral" ones. Thus, rather than rejecting all classified contracts outright one rejects only those that fail to pass certain criteria. A system for routine scrutiny of all proposed research contracts for appropriateness is precisely what has been established several years ago and has worked well. A committee was appointed that assures the compliance of proposed classified as well as unclassified research with the criteria set up by the university community. The committee is presently under the chairmanship of Prof. Baxter and consists of faculty as well as student members. The argument will presumably be made that the present criteria originally established by the faculty, while concerning appropriateness from academic as well as moral points of view, are not stringent enough and would not automatically reject research that is of military nature. However, there is no reason why such criteria could not be established. True, these criteria will be very much more difficult to establish than academic criteria since they involve a moral judgement of just what type of military research will not be acceptable; however, there is no reason why a difficult task should not be attempted. I personally would find the following guidelines reasonable:

No research should be undertaken if:

1. The research is aimed towards applications in immoral wars (I would put the Vietnam war in this category, but not the war against Hitler and Germany).
2. The research is aimed at devising means for human destruction. (I would put research related to atomic weapons, CBW, etc., in this category).

3. Research is aimed toward the exploitation of particular groups of persons, races, nations, etc.

The complexity of the problem of arriving at criteria for the moral acceptability of research becomes apparent from an inspection of the above list. Morality is not a matter of absolutes but of degree, e.g., a truck driver that brings supplies to a laboratory engaged in CBW research certainly aids CBW research, but many people will find his contribution to CBW morally acceptable but not that of the engineer conducting the research. As our concepts of morality change, the acceptance criteria will need updating. These periodic reappraisals may serve well to remind us of our social responsibility.

2. Since Military Research is Immoral, Should not Universities Refuse To Take Part in It?

Military research in general is certainly not as humanitarian as, e.g., medical research in general. However, I believe few will argue that military research in the interest of self-defense is immoral. So one has to make a decision again as to what kind of military research we find immoral. For a University community to refuse to take this responsibility of making a moral decision by completely disassociating itself from the problem, i.e., from all military research, is simply passing the buck to the outside community. I believe that a University should not completely isolate itself from research and work that is relevant to the community at large. As long as military research is as important to the community at large as it presently is (unfortunately), I believe, a small involvement of the University in military research is beneficial to humanity as I will discuss in more detail below.

First, let me state my assumption that a university makes contributions to mankind through three functions:

1. Teaching function, i.e., handing down knowledge and wisdom
2. Research function, i.e., carry out basic and applied research to increase knowledge
3. Public service function, i.e., carry out work that is relevant to the contemporary society, e.g., advise the government on the problems of pollution control, urban renewal, ABM system, etc.

The first two functions are historically well-established. The third function is slowly gaining acceptance but is at the same time still being debated. The argument against it is, that a university getting involved in controversial issues of our times will sacrifice its academic freedom, independence and detachment. While it is obviously impossible to do anything relevant without becoming involved to some degree, the advantages to be gained by an involvement of the University in relevant research should far outweigh the disadvantages. A University constitutes a large pool of knowledge and expertise and at the same time enjoys a degree of objectivity that is only equalled by few social institutions (perhaps the judiciary). This objectivity is based on a number of factors that are peculiar to the University environment, e.g., the faculty is exposed to a large variety of crosscurrents of ideas that can be found only in a campus environment, tenure permits faculty to hold unpopular opinions with little fear of job security. This degree of objectivity decreases as one goes from the universities to non-profit organizations, and finally to industry. Nobody would expect a cigarette manufacturer to carry out an objective study on the effects of smoking. It is just unreasonable to expect someone to make an unbiased investigation of a product in which he has a vested interest. Because of the relative objectivity of university research, the benefits that can accrue to humanity are great when this objectivity is brought to bear in a public service role. This unique position of university research applies presently also to military technology because of the classified research that is being carried out on campus. If our universities completely disassociate themselves from military research, there may come a time when the only scientists with competence in ABM

technology are the ones in the employ of the Pentagon and the missile makers. I think it would be highly undesirable to have only those with vested interest in an ABM system advise our government and its people on the merits of the system. Only continuing involvement of our universities in classified research will maintain the capability of a university to carry out its public service role in the area of classified military research.

At this point I would like to briefly deal with the argument that the creation of restricted information (through classified research) is incompatible with the main purpose of a university, which is the dissemination of knowledge. While it is true that this has been the historic function of the university, I see no reason why this function could not be expanded provided we find this is the interest of society.

3. Stoppage of Classified Research at Stanford will Start the Ball Rolling?

The third assertion follows the argument that one has to start improving the world in one's own house. It is argued that a refusal to do classified research by Stanford and other Universities will have such an impact on the scientists and engineers working directly for the Defense Department and industry that they will also refuse to do classified work, which will in turn inspire the scientists of Russia. Without the scientists and engineers support, classified research all over the world will grind to a halt and the world will be better for it. Obviously, the flaw in this reasoning is that it just does not take into account some very important realities. The number of university scientists working on classified military research constitutes only a very, very small minority when compared to the number working for the Defense Department and defense industry; the impact of their action would be correspondingly small. The funds presently being spent on classified university research, though large by university standards, are quite a small percentage of the total defense research budget and can easily be shifted to Defense Department laboratories or industry. Another important difference between classified university research and Defense Department and Defense industry research is that of job security. While the small

number of people involved in "immoral" classified research (excluding the great majority of classified research which is moral, see Item 1 above) at universities would probably not require any reduction in staff other than by attrition (provided the classified programs were phased out over a period of time), this would not be the case in the Defense industry. In the defense industry, mass lay-offs would be the inevitable result and the support of their scientific personnel for stoppage of classified research would therefore be certainly less than enthusiastic, I should think it would not be supported at all but, on the contrary, most strongly resisted. Given these realities it does not appear that stoppage of classified research on campus will have much of an effect, if any, on the nation as a whole.

Conclusion:

I believe the above discussion showed clearly that a stoppage of classified research on campus will not further the goal of rearranging our national priorities away from developing technology for destruction and killing of man towards means that help men live. What, then, can be done to work towards that goal? I believe that there are a number of positive steps that can be undertaken by concerned people; these steps include:

1. Voting
2. Letters to legislature
3. Education campaigns against Vietnam War, CBW, ABM, etc.
4. Educational campaigns for increased spending on pollution research, social research, urban problems, etc.
5. Demonstrations and marches in protest against Vietnam War, CBW, ABM, etc., and for pollution research, social research, etc.

If the public at large can be convinced (and it needs convincing) that it is in its best interest to reduce military spending and to demand an increase in the spending for pollution control, urban renewal, etc., the shift by industry to meet this demand can be made with relative ease, i.e., the scientists and engineers that have worked on the airframes of bombers will find it not too difficult to apply their skills to the frames of a rapid transit car, but they do not want to be without a livelihood.

It is these steps that, I believe, concerned people should take, not only because such action is the democratic way, but because these steps appeal to common sense.

April 17, 1969

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The undersigned members of the Systems Techniques Laboratory agree with the views expressed in the paper entitled "A Case for Classified Research" by Hermann Schmid

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