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HEADQUARTERS
Office of Strategic Services
India-Burma Theater
APO #432, NY

18 August 1945

TO : General Donovan

THROUGH: Colonel J. G. Coughlin, Strategic Services Officer, OSS/IBT

SUBJECT: Influence of Atomic Bomb on Indirect Methods of Warfare

1. With the invention and small scale demonstration of the atomic bomb, it becomes essential to consider the probable changes in the methods of war which must follow from this technical advance. We can be sure that the nation which pays most intelligence attention to this problem will benefit greatly and that any nation which allows itself to be lulled into inattention to these problems will suffer.

2. To forecast these changes in detail is, of course, impossible. It is possible, however, to foresee certain radical changes in the role of such agencies as O.S.S. for Force 136 which are majorely concerned with psychological warfare, clandestine operations and strategic intelligence. The present memorandum is concerned solely with these aspects of the matter.

3. Certain very general facts about the manufacture of atomic bombs must however be stated in order to make the position clear:

- a) The general principles upon which these bombs operate are already known to a very large number of physicists in all countries, and several hundred physicists, including Englishmen, Americans, refugee scientists and probably Russians, have been engaged in the recent intensive research and preparation of the actual bombs. We know also that the German physicists were very close to the same discoveries.
- b) The main requirements for the making of atomic bombs appear to be access to a supply of Uranium ores containing the appropriate isotope, and access to very large supplies of hydro-electric power. The Uranium isotope is apparently not excessively rare and the need for hydro-electric power is more likely to be a delaying factor than the lack of Uranium.
- c) The need for large supplies of hydro-electric power for the isolation of "heavy water" may disappear in the next few years, when it becomes possible to use atomic energy for this process.

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- d) The very small quantities of radium, which are probably necessary to arm these bombs are already available to all major nations.

4. From these facts it appears that no high degree of security in regard to the atomic bomb can be expected and that all the major powers are likely to have weapons of this sort within the next ten years.

5. Essentially these weapons may be described as changing the relation between attack and defense. It may have been true shortly after the last war that the advantage lay with defence, but since then the methods of attack have steadily improved, outdistancing the methods of defence. Today with the use of rocket aircraft and atomic bombs, attack may be said to have finally outdistanced defence and we may be fairly sure that this balance of advantage on the side of attack will remain for a considerable time, and will be a governing factor in shaping international relations in the next ten or twenty years.

6. Both American and England - the countries which at present control the atomic bomb - are peculiar in the unwillingness to embark upon unprovoked attacks and we can be sure that these nations will endeavor (with a minimum of propagandic hypocrisy) to use the atomic bomb only as a disciplinary threat to restrain the aggression of other nations. Neither America nor England will resort easily to using the bomb as a means of national expansion or as a means of destroying other nations. (The obvious fact that the invention of the bomb has averted the destruction of Japan is an indication of this trend.)

7. The amount of provocation required to draw these two nations into war depends in large measure

- a) upon their distaste for overt aggression; and
- b) upon their exaggerated sense of their own power and security.

Now that they possess atomic weapons we must expect them to be even more reluctant to indulge in overt aggression because aggression has become so much more destructive. In addition they will be even more prone to believe themselves secure through the possession of what appears to be an invincible reply to the aggression of others. The amount of provocation necessary to draw us into acts of war will therefore increase.

8. As regards other nations, who as yet do not possess the bomb, we can be fairly sure

- a) that if they had it they would be a good deal less squeamish about its use against less well equipped neighbors;
- b) that, not possessing the bomb they will resort to "peaceful" rather than "warlike" methods of international pressure in their dealings with England and America. They will not resort to open aggression until they have thoroughly softened us up by propaganda, subversion, sabotage, diplomatic and economic pressure, etc.

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9. The invention of the atomic bomb will therefore cause a shift in the balance between "peaceful" and "warlike" methods of exerting international pressure, and we must expect a very marked increase in the importance of the "peaceful" methods. Our enemies will be even freer than they were in 1938 to propagandize, subvert, sabotage and exert economic pressures upon us, and we ourselves shall be more willing to bear these affronts and ourselves to indulge in such methods - in our eagerness to avoid at all costs the tragedy of open war.

10. In war itself, large concentrations of troops will cease to be the major instruments of attack. Land armies will still be necessary for mopping up, policing and occupying territory but their aggressive functions will diminish. In the last few months we have seen how our armies in Europe have become in some degree secondary to the air borne attack which achieves a preliminary softening up of industry and military installations, and in the future we must expect a very great further change in this direction. Armies, military installations and large industrial concentrations have become vulnerable to the new destructive inventions.

11. Notably, the atomic bomb is powerless against certain types of operations. Armies of occupation will be immune, so long as the occupied nation is unwilling to sacrifice the civilian population living in the occupied area, and this immunity may be of considerable importance in determining their functions.

12. In addition, atomic weapons are powerless against the "peaceful" methods of war. Guerrilla tactics, white and black propaganda, subversion, social and economic manipulation, diplomatic pressure, etc. - all of these are immune to atomic attack.

13. Armies of occupation, while immune to atomic attack, are vulnerable to and must expect a large amount of attack by the "peaceful" methods. Such armies, separated from their homes in a period which they regard as "peace" and attempting the political and psychological remodelling of a whole enemy nation, are themselves engaged in Psychological Warfare of a very special kind, and their operations will meet with resistance which must inevitably take the "peaceful" forms.

14. From the above paragraphs, it appears that we must look forward to a very great increase in the importance of the "peaceful" techniques of international pressure in times of pre-war softening up, in times of actual overt war and in times of post-war manipulation.

15. It is no exaggeration to say that for the next twenty years, the most important international and war-making agencies of the United States, in order of importance will be:

- (1) The physical laboratories and industrial plants concerned with atomic weapons;

- (2) The air force and its research and production industries;
- (3) Some agency acting under the State Department and combining the functions of O.S.S., O.W.I. and F.E.A.;
- (4) The land and naval forces.

16. To establish this third agency, mentioned in the paragraph above, will be a matter of very great difficulty in the face of the present trends in American feeling. Already even the best personnel in O.S.S. are beginning to think that their job is finished, and powerful forces in government are already aligned to get rid of the agencies concerned with clandestine operations, psychological warfare, international economic controls, and the collecting and analysis of the strategic intelligence necessary for these types of warfare. Even in time of war it has been hard for the O.S.S. to do its proper job without being side-tracked into military intelligence, and in the immediate future the difficulties in our way will be even greater. The importance of the type of work for which the O.S.S., the O.W.I. and the F.E.A. were originally designed is, however, infinitely greater than it has even been. Hitherto we have been able to let the Army and the Navy do most of the job for us. This is no longer possible.

/s/ Gregory Bateson

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