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Staff Memorandum

LEAFLET DROPPING IN KOREA BY THE FAR EASTERN AIR FORCE

By

William Daugherty

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Operations Research Office  
The Johns Hopkins University  
Far East Command

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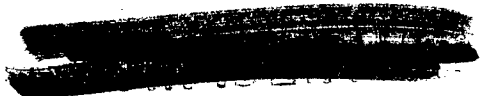
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## LEAFLET DROPPING IN KOREA BY THE FAR EASTERN AIR FORCE

### Problem

It is the mission of this study to assess the performance of the leaflet bomb and fuze which have been used in the Korean campaign and the adequacy of the liaison which has been maintained between the Special Projects Branch, G-2, GHQ, and the Air Force personnel who have disseminated the bulk of the propaganda leaflets produced.

### Facts

Propaganda leaflets have been the major media used in the psychological warfare operations in Korea.

Although the Special Projects Branch, G-2, GHQ, has produced all of the UN leaflets which were prepared in Japan, it had no means of disseminating the bulk of their production except as the Far Eastern Air Force made planes available for leaflet-dropping missions.

Until approximately 10 December 1950 the Far Eastern Air Force had promised only two B-29's for two sorties each per week for leaflet dropping in Korea. However, on a number of recent weeks the number actually provided exceeded the minimum number promised.

Beginning Tuesday, 19 December 1950, the Far Eastern Air Force agreed to make one B-29 available for one leaflet sortie each day of the week.

Through Tuesday, 12 December 1950, The Special Projects Branch, G-2, GHQ, had printed and disseminated over 147,000,000 leaflets. Of this number, 88 percent, or 131,000,000, were dropped by the B-29's of the 98th Bomb Group, stationed at the Air Force Base, Yokota, Japan.

The M-16, 500-pound cluster adapter bomb has been

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Facts

used exclusively in dropping leaflets from the B-29's. The fuze which has been used with this bomb is the M-111-A2.

The Chief of the Psychological Warfare Division, Office of the Assistant Chief of Staff, G-3, Department of the Army, in a letter dated 14 November 1950, requested the Director of the Operations Research Office to ascertain the answer to the following questions. "Have the leaflet bombs used in psychological warfare operations in Korea proved to be satisfactory? If not, wherein should improvements be made?"

The major part of the material used in the writing of this report was procured as the result of conversations with Capt. Jack Sirney, USAF, currently assigned to The Special Projects Branch, G-2, as liaison officer for FEAF, and from interviews with officers and men of the 98th Bomb Group, while on a visit to the Air Force Base, Yokota, Japan, 12 December 1950.

### Discussion

On Monday, 11 December 1950, while on a routine visit to the office of The Special Projects Branch, G-2, GHQ, the writer first met Capt. Jack Sirney, USAF, (who had only recently joined SPB) through a letter of introduction, not by the customary formal orders. Immediately prior to leaving the States, Capt. Sirney had completed a two-year course of instruction at Georgetown University, Washington, D. C. This training had been designed by the Department of the Air Force to prepare officers for careers in the field of psychological warfare. Upon assignment to SPB, Capt. Sirney was given the task of coordinating the propaganda effort of SPB and the leaflet dissemination effort of FEAF.

For several months it had been the practice of FEAF to allocate two B-29's for two missions each per week to make leaflet drops in Korea. FEAF assigned the missions to the 98th Bomb Group for implementation. Then, in order to develop the closest possible relationship with the crews that dropped their leaflets, it became necessary for the SPB to improve their liaison with the 98th Bomb Group. It was to this work that Capt. Sirney first directed his attention, after his assignment to SPB.

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Capt. Sirney informed the writer that one of his first accomplishments was the successful negotiation of a new arrangement whereby the FEAF would provide one leaflet sortie per day on at least four days of the week. Thus, even though SPB did not gain any additional deliveries of leaflets per week, the new schedule would provide a greater opportunity to drop them on special occasions. It was in response to requests of The Special Projects Branch, G-2, that FEAF agreed to make at least one B-29 available on four separate days in any one week. FEAF promised to provide at least one leaflet sortie per day beginning Tuesday, 19 December 1950.

Up to and including Tuesday, 12 December 1950 SPB printed over 147,000,000 leaflets. Eighty-eight percent of these were delivered over Korea by the 98th Bomb Group, based at Yokota Air Force Base. On 11 December 1950, Capt. Sirney said that he would be going to Yokota to brief the B-29 crew assigned the leaflet mission for the following day. He invited the writer to join him. Thus, most of the material for this report was secured from further conversations with Capt. Sirney and more especially from interviews with the officers and men of the 98th Bomb Group who had participated in previous leaflet missions.

Capt. Sirney, Maj. Clifford Folen (an Army Officer assigned to liaison duties by The Special Projects Branch, G-2), and the writer left Tokyo, by GHQ staff car, Tuesday morning, 12 December 1950, 9:20 a.m. The three reached the Yokota Air Force Base at 10:40 a.m. It was understood that the briefing was to take place at 11:00 a.m. Upon arriving at destination, Capt. Sirney and party reported to the Group's Intelligence Officer, Capt. Shaw, who gave out the surprising news that the leaflet mission scheduled for that day had been scratched. Since Capt. Shaw was unable to give the reason for the cancellation, it was suggested that the Group's Operations Officer be contacted.

The Operations Officer, a major, confirmed the information that the next scheduled leaflet drop had been cancelled on orders of the A-3 (operations officers) of the Bomber Command. The major, however, could not give the reason for the cancellation order. He did state that the group was having difficulty in meeting its operational commitments because of maintenance problems. He said that if planes were diverted to leaflet missions it meant there would be fewer planes to carry the convent-

ional type of bomb. Capt. Sirney replied that it was ridiculous for either the Bomber Command or the Bomb Group to arbitrarily decide which type of mission was the more important since the personnel in either group could not possibly have access to the over-all strategic picture. Furthermore, he asserted, the action which the Bomber Command had taken was in direct contradiction to arrangements which SPB had made with Headquarters, FEAF. Capt. Sirney and Maj. Folen thereupon decided to speak to the A-3 of the Bomber Command.

The writer did not accompany Capt. Sirney and Maj. Folen on their visit to the A-3. They had an operational problem which he believed they could solve better with no onlookers present. Furthermore, the S-3 of the 98th Bomb Group agreed to summon as many of the officers and men of the unit as they could locate who had been on previous "paper" missions. Thus, the writer had an unexcelled opportunity to meet and discuss the problems of leaflet-dropping with the officers and men engaged in such operations in the recent past.

Capt. Sirney and Maj. Folen relayed to the writer the substance of their conversations with the A-3, which is reported here for the record. They apparently discovered the Operations Officer of the Command to be an obstinate and misinformed officer, one who was completely lacking in sympathy for the mission of psychological warfare. He told Capt. Sirney, in effect, "We won the war against the Japanese, although we never had to drop leaflets to subvert them". When the Captain advised him that he was misinformed, he changed his line of approach, asserting, just as erroneously, that leaflets were never dropped on Japan proper. All this would tend to support the conclusion that it is not enough for psychological warfare administrators merely to win the cooperation and sympathy of officers in the top policy-making echelon. A failure to educate, through the issuance of appropriate orders, the operational personnel who must implement policy decisions may lead to wasted effort and lack of coherent action, as it did in this case.

It was impossible for the writer to record the names of all the personnel within the command with whom he conversed. However, the following list will give some indication of the representative character of those he met.

Capt.	Chester	Siezinski	a pilot
Capt.		Heiden	a navigator
Capt.		Goodson	a bombardier
Capt.		Wise	(duty unknown)
1st Lt.		Dearian	a bombardier
1st Lt.	Wayne	Wright	a pilot
S/Sgt.	Clarence	Ulch	a gunner
S/Sgt.	William	Manderville	a gunner

Of the men interviewed, none had been on fewer than two leaflet missions, and a few had been on as many as six. It had been the practice of the Group to divert for leaflet-drops either one or two B-29's, as agreed upon, from the number that would otherwise carry the conventional type of bomb on any particular day. Thus, it was never known far in advance which plane or crew would draw the "paper" mission. The crews were not aware that any particular method was used in deciding which plane would carry leaflets. However, all professed that they were pleased whenever it fell to their lot to carry paper. This was in contrast to conditions which prevailed during the early days of the last war when bombers based in England were asked to drop leaflets over Germany. At that time most crews preferred to drop incendiary or fire bombs.

There appear to be a number of reasons why the men of the 98th Bomb Group like to carry paper instead of lethal bombs. An understanding of or sympathy for the mission of psychological warfare has little, if anything to do with their attitudes. The primary reasons for their enthusiasm for "paper" missions would appear to be the following: first, leaflet bombs weigh less and consequently it is easier to maneuver a plane loaded with paper; second, all recent leaflet missions have been confined to the front lines where there has been a noticeable lack of flak; third, it has now become SOP to drop leaflets only during the hours of darkness. At such time there is far less chance that the crews will be faced with the necessity of fighting off interceptor planes while going to, returning from, or flying over their target areas. Thus, no one is ever displeased when assigned a leaflet mission.

Since it was known that the Psychological Warfare Division, Department of the Army, was interested in the performance of the leaflet bombs used in the Korean

operations, a major part of the inquiry directed to the crew members was focused on questions dealing with this subject. It was earlier learned that thus far the only bomb used in Korea was a type which had been developed during World War II, the M-16, 500-pound cluster adapter. In order to get a reasonably decent performance from this bomb, it has been necessary to modify the equipment in the nose of the bomb after it has reached Japan.

Personnel in The Special Projects Branch, G-2, GHQ, stated that the M-16, 500-pound cluster bomb had been subjected to extensive field tests at the Aberdeen Proving Grounds and Eglin Air Force Base, Florida, prior to the outbreak of hostilities in Korea. Results of these tests showed conclusively, according to informants, that this bomb was far from being completely efficient. It is interesting to note that the defects found in these tests are identical with those listed by the officers and men of the 98th Bomb Group. These are:

1. Bombs tend to tumble when they leave the plane, This frequently causes the tail fin to break loose, thus further throwing the bomb off the desired course to the target.

2. Bomb casings frequently are not securely fastened. Sometimes they come apart while still in the bomb bay, at other times it is noticed that the bomb breaks open as soon as the bomb hits the slip stream.

3. At times it is believed that improper or faulty fuzes have lead to improper dissemination of leaflets. Occasionally this has meant early detonation of the bomb, thus scattering leaflets well beyond the intended target. On other occasions the fuze has failed to open the bomb casing sufficiently to allow the leaflets to scatter.

Largely because of defects disclosed at Aberdeen, Maryland, and Eglin Air Force Base, Florida, the writer was told, at least two improved bombs were developed-- the M-105 and the M-16A-1. However, so far, none of these bombs have reached the Far East Theater, even though every requisition which has been placed for leaflet bombs, in recent months, has requested the improved bombs by number, or, "the best cluster adapter



bomb available". Therefore, Air Materiel Command has received only the older outmoded M-16. The fuze which has been used with this bomb is the M-111A-2.

It is believed that it will surprise no one concerned with such matters to find that the M-16, 500-pound cluster adapter leaflet bomb, has proved to be far less than satisfactory. There was only one officer and no enlisted man, among those interviewed who estimated that the bomb functioned properly more than 70 percent of the time. Capt. Goodson, a bombardier, who had been on as many as six missions, believed that nineteen of every twenty bombs functioned with a sufficient degree of efficiency to be termed satisfactory. However, he would include among the nineteen satisfactory bombs all of those that tumbled since he did not think it was necessary to attain a high degree of precision to achieve good results in leaflet warfare.

Capt. Heiden, a navigator, made a strong plea for the utilization of a smaller bomb. He is included among those who estimated that no more than 70 percent of the bombs functioned as intended. The M-16, which is being used at present, distributes approximately 22,500 of the standard size (5" x 8") leaflets, or approximately 45,000 of the smaller (4" x 5") ones. Capt. Heiden pointed out that under the very best conditions the opportunities for error would still be numerous, some human, others mechanical. He argued that as the objective was to place leaflets in as many hands as possible, this could best be attained if one did not entrust so many leaflets to one bomb. If the size of the bomb were reduced, more could be dropped over a given target area. There would always be some that would open, whereas now if a given area is assigned only one bomb and it fails to open, no one in that area will be affected by that particular psychological warfare effort.

Under present arrangements, a B-29 can carry 32 M-16 cluster-adapter leaflet bombs. It has been the practice in the past to assign a bomber a run of about 200 miles between the points where the first and last bombs were to be dropped. The mission which Lt. Dearian flew the night of 9-10 December was of this extent. He was instructed to drop the first bomb on Chinnampo, which was then the western anchor of the front line. From there he followed a course to the northeast through Pyongyang to the Cho-

sin Reservoir area and then south to Hamhung and Hungnam. Along this 200 mile course he was instructed to drop 32 bombs at selected intervals. If he had spaced these bombs at fairly equal distances, he would have averaged one bomb every six and one half miles. If the estimate of 70 percent efficiency is accepted, then one must take account of the fact that nine or ten of the bombs failed to open. The points along the line where these fell may well have received no leaflets whatsoever. It is possible that the defective bombs were released over the most populous areas or over the most receptive groups. Actually no one will ever know. Capt. Heiden asked, "Why put so many of your leaflets in one bomb and waste so many through errors of human judgment and failures of mechanical equipment?"

When Capt. Heiden's proposal for utilizing a smaller bomb was mentioned to a larger group, the reactions were mixed. There were a few who thought the proposal had real merit. However, there were others who said the proposal was impractical under present operating procedures. A B-29 can carry a maximum of 40 bombs. Therefore, as long as the Air Force continues to follow the practice of rotating the paper missions through a group, it will be impossible to increase the total number of bombs carried by more than eight. The suggestion has been offered, to counter this argument, that certain planes and crews should be permanently assigned, to leaflet missions, and that the bomb racks within the selected planes be altered to carry a larger number of bombs. This arrangement, however, is likely to be opposed by the Air Force for three reasons. First, any structural changes in the aircraft would greatly reduce its over-all utility in a war effort. Second, such an arrangement would greatly increase morale problems among the flying personnel. Finally, such a plan of operation would upset the shop maintenance schedules by preventing the free rotation of planes within a group.

Two or three of the officers believed a considerable part of the malfunctioning of the bomb could be traced to defective fuzes. Lt. Dearian thought that it would be desirable to use a barometric type of fuze such as the British have used successfully on flare bombs. The Lieutenant thought that with this type of fuze it would be possible to set it so that it would detonate the bomb in any kind of weather and when flying at any

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altitude. In the absence of a better fuze, Lt. Wright, proposed that two fuzes be attached to a bomb, as is commonly done with fire bombs. The second fuze would be set to detonate in the event that the first failed to function. He believed that such an arrangement would greatly increase the effectiveness of leaflet dissemination.

Lt. Dearian, a bombardier, said that B-29 crews never received as much information relative to the ground positions of both enemy and friendly forces as was needed for a truly effective effort. On the 200-mile flight of 9-10 December, described previously, it was the mission of Lt. Dearian to bomb enemy positions along the front lines. He was told that this line ran roughly from Chinnampo through Pyongyang, and thence northeastward to the Chosin Reservoir, then south from Yudamni through Hagaru-ri, Koto-ri, and Hamhung to Hungnam. He said that he was given no further information as to how he was to identify enemy lines or how he was to distinguish these from those of the UN forces.

As the plane proceeded eastward from Pyongyang he observed what could be described roughly as two parallel lines formed by blazing fires. From a height of 16,000 to 20,000 feet, it was impossible to tell whether the south line actually was the rear guard of the UN forces and the north line the most advanced positions of the enemy. He said that the fires could have been the result of counterbattery fire; they could have been evidence of American withdrawal and the deliberate burning of supplies; or they might have been nothing more than the determined effort of troops on either or both sides of a front line to keep warm during the long cold night. Since he was not certain where the front line lay, he followed his best judgment and released bombs periodically along the most northern of the two parallel lines of fires.

Lacking accurate intelligence reports as to what the situation was along the front line, it was not possible, according to Lt. Dearian, to know whether the bombs were actually released over enemy or friendly troops. Now that all flights are made at night and all bombing is from high altitudes, it is all the more difficult to know where the bombs actually land. Lt. Dearian remarked that he is not at all certain that he did not

waste most of the 32 bombs he carried on this occasion.

Lt. Dearian pleaded for more detailed and accurate information as to the location of front line units. However, it would appear to the writer that he is asking for the impossible. The bombers are based at points five to six hours flying time from the front lines in Korea, the crews are briefed several hours in advance of take-off time, the missions are flown only during the hours of darkness and the bombs are released at very high altitudes. Under these circumstances, it is difficult to see how the latest available ground information would help much. The answer would seem to be that the B-29's are an extremely poor means for pinpointing targets which are constantly moving. After all, as the leaflets which have been produced are strategic in character, the most profitable place for their dissemination would appear to be somewhere other than on a line which is manned by an aggressive foe. There appears to be some confusion in the minds of the leaflet planners as to the best target for a strategic type leaflet. If one desires to disseminate leaflets on the front line there are better ways of doing this. A retreating force can always leave them about for the pursuing enemy to pick up; they can always be dropped on known enemy pockets by artillery liaison planes, or they can be pinpointed to a desired target by 105 artillery shells. Drops by B-29's are not the most effective way of reaching front line groups.

There were others in addition to Lt. Dearian who declared that the briefings in the past had not been all that they might have been. However, Lt. Wright, a pilot, said that there had been a great improvement with respect to these during the preceding three weeks. He mentioned Capt. Sirney as the one who was responsible for the improvement, and was not aware that the Capt. was with the writer on the visit to the Air Force Base. Lt. Wright expressed considerable satisfaction over the fact that someone had taken the trouble to present the broad picture of the nature of psychological warfare, what The Special Projects Branch was attempting to do, and what results had been achieved in the Korean campaign. He said that the information not only was interesting, but very necessary to insure the high morale of crews sent at night on lonely missions.

To illustrate how poorly the crews had been briefed previously, Lt. Wright said that prior to approximately 5 December, five months after the leaflet missions were started, no one within the Group had seen bombing tables for leaflet bombs or known that they existed. Capt. Sirney had produced one on a recent visit to the group and the men were so anxious to get copies of it that they arranged to have it reproduced at the base. Thus, it was only after 125 million leaflets had been dropped, over a period of five months, that the crews making the leaflet drops learned that bombing tables had been prepared which, when used, would insure greater accuracy in hitting intended target areas.

Several of the officers showed great interest in receiving additional information about the results which had been achieved in previous drops. They indicated that they would greatly appreciate any information on the results after any particular drop. Capt. Goodson, a bombardier, illustrated how important he thought this was. He said that as he and his crew were on their way back to base one day he was looking for a likely target for his last bomb. He spotted a small village off the plane course and at his suggestion the pilot veered off the path they were following for release of the last bomb. A few days later, he said, he picked up a copy of Stars and Stripes and read that a number of the enemy had surrendered in the village where he had dropped the last bomb. The news account inferred that each of the prisoners of war had in his possession a leaflet of the type that Capt. Goodson had dropped. Capt. Goodson said that it had gratified him to believe that he had played a direct role in reducing the manpower potential of the enemy. Bomber crews assigned to lethal missions have no difficulty in observing the results of their operations. They see the destruction they cause, either visually at the time, or by viewing aerial photographs later. When dropping leaflet bombs, they must have the cooperation of intelligence personnel, ground forces, and briefing officers, if they ever are to achieve the same degree of satisfaction.

### Conclusions

Although approximately 150 million leaflets have been produced and disseminated in Korea, it is evident that the effort has not produced the most effective re-

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Conclusions

sults. Reasons for this are as follows:

1. The evidence is overwhelming that the bomb and fuze which have been used are not efficient. Much remains to be done toward perfecting this bomb and fuze.
2. There may be a better leaflet bomb than the M-16 which has been used exclusively in the Korean campaign. If this is so, the individuals responsible for the procurement of supplies for the Far East theater must be apprised of this. Either an improved bomb has not gone beyond the drafting table, or, if produced, it has not been made available to the Far Eastern Air Materiel Command for use in the psychological warfare effort in Korea.
3. Although liaison between The Special Projects Branch and the 98th Bomb Group has not been all that might have been desired during the past five months, it is gratifying to report that a very noticeable improvement has taken place in this respect since the assignment and arrival of a qualified Air Force Officer for this duty.
4. After a most careful consideration of all of the facts available to him, the writer has reached the conclusion that the B-29 is a poor medium for delivery of bombs to front line units. If a leaflet message is one which should reach enemy front line units, why not use a means which would better insure that the greatest possible number would reach potential readers? Such means would include use of artillery shells, liaison observer planes, and infantry rear guard troops leaving leaflets at convenient places for the pursuing foe to pick up. Dissemination of leaflets by B-29's is both inefficient and costly.

#### Recommendations

It is recommended that the following action be taken:

1. The Director of the Psychological Warfare Division, Office of the Assistant Chief of Staff, G-3 Department of the Army, should be informed that it is the opinion of the majority of the bomber crews which have delivered 88 percent of all leaflets printed for the

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Korean campaign that the M-16 bomb and the M-111A-2 fuze have not operated with a high degree of efficiency.

2. The Far East Air Materiel Command should be encouraged to continue their requisitioning of a more efficient type of leaflet bomb. If a better bomb does not exist, SPB should be so informed in order that it can urge continued study on the problem of developing one.

3. Consideration should be given to the advisability of using a smaller bomb than the M-16 for dropping leaflets.

4. Consideration also should be given to the advisability of using two bomb fuzes to increase probability of detonation at the prescribed height.

5. The Special Projects Branch should consider discontinuing the use of the B-29 for dissemination of leaflets over the front lines and should give renewed thought to the problem of how to employ more effectively such aircraft as are made available by the Far Eastern Air Force for leaflet dropping missions.

6. Consideration should be given to entrusting leaflet dissemination along the front lines to the artillery shell and to other types of aircraft than the B-29.

7. Capt. Sirney, USAF, who has had the task of liaison between SPB and the Bomb Group during the past few months, should be complimented on the initiative and energy that he has displayed in tackling this highly necessary job, and for presenting the briefings and indoctrination talks to Bomb Group personnel so effectively as to arouse the enthusiastic response that has been consistently displayed.

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