TENTATIVE REPORT ON CONDITIONS AT THE WRIGHT AERONAUTICAL CORPORATION PLANT LOCATED AT LOCKLAND? OHIO

The subcommittee visited the engine plant of the Wright Merchautical Corporation located at 100cland, Ohio, on April 1 and proceeded thereafter to hold executive sessions at Cincinnati, Ohio, on April 1, 2, and 3. Approximately 25 witnesses were heard and an estimated total of 500 pages of testimony taken, in addition to conferences with company officials.

The Wright Aeronautical Plant produces a 14-cylinder aircooled 1700 horsepower engine at a present rate of approximately 1700 a month. Approximately \$8,000,000 worth of spare parts a month are also shipped. It has approximately 27,000 employees, of whom 2,400 are inspectors. The Government inspection consists only of spot check and the government inspection force totals about 70. This is a result of the company's having a Class A inspection rating, which entitles it to the confidence of the Government to the extent that the Government relies primarily on the company's inspection and simply checks a small percentage of the product. The plant also holds the Army "E".

The Committee arrived at the following conclusions based upon the evidence heard thus far:

1. Due to inadequate inspection by both the company and the Government, defective materials must necessarily be incorporated into engines and also shipped to the field

as spare parts. It is indisputable that defective engines have been shipped.

- 2. The inspection personnel is inadequate.
  - a. Company inspectors have insufficient training and have testified that they are told to pass bad material. They are also repeatedly overrulled by their superiors when they attempt to reject such material.
  - b. There is an insufficient number of Government inspectors to properly police the plant.
- 3. Inspection records are forged and changed to bring parts within tolerance.
- 4. The testing of the hardness of the gears is faked. This is measured on a machine and readings within 4 points of the minimum requirement are brought up to the minimum. The sky is the limit on maximum hardness. All false tests are recorded on the final inspection as being within minimum limits of hardness.
- 5. Government inspectors are not furnished precision instruments for inspection of gears and other parts nor are they allowed to use company instruments. They are not allowed to require tests to be made by the company in their presence.

- 6. The company repeatedly appeals from rejections by army inspectors to their superiors and to the inspector in charge for the plant, and has even appealed from its inspector in charge to the Army Technical Advisor pn Wright engines who is stationed at Paterson, New Jersey.
- 7. The use of rejection stamps on defective material has been abolished.
- 8. The salvage committee, which reviews all rejections by inspectors, for the purpose of ascertaining whether the material can be used in an engine, meets without a government inspector present, although company officials informed the committee that the salvage committee consisted of two company inspectors and one government inspector. The present system constitutes a conference of defense counsel to prove the government inspector wrong.
- 9. No system is in effect to prevent rejected material from being returned to finished and inspected storers.
  - a. Rejected material is not adequately marked or identified.
  - b. Material which cannot be salvaged is not mutilated under the supervision of a government inspector.
  - c. Rejected material is strewn loosely in close proximity to satisfactory material all over the plant.
  - d. The salvage room, to which rejected material is consigned for review by the salvage committee, is an unlocked space to which company employees have frequent access.
  - e. Rejected material is identified only by a hold order which is not attached to the material. Proper duplicates are not

kept nor are duplicates followed through. This allows hold orders to be misplaced, destroyed and altered. As a result, defective material is transmitted to finished storers without the hold order and good material is frequently substituted. for the rejected material, resulting in final acceptance of the material and cancelling of the hold order by the salvage committee. Good material is thus easily substituted for red jected parts to throw suspicion on government inspectors who have rejected the defective parts.

- 10. Parts coming out of finished storers either go into engines or are shipped to the field as spares. Those which go into engines are subjected to a test run and a final inspection. Those which are shipped as spares receive no further inspection by the army. It is almost impossible for government inspectors to find defective material in inspection of parts along the production line.
  - 11.Morale of both company and Government employees is at a very low ebb.
    - a. The feeling is prevalent in the plant among employees that they are not doing a good job on quality production.
      - b. Production dominates inspection causing low morale among inspectors.
      - c. Company inspectors are permitted to falsely present good
        parts to Chief Government inspectora and claim they were rejected by government inspector, thus disturbing morale of
        Government inspectors, and destroying their efficiency.

- The Chief Inspector does not follow through on evidence of this kind taking company's word against his own men without inspection or apportunity to defend themselves.
- d. There is a general feeling prevalent among employees
  interviewed that the Government is being deliberately
  cheated at the expense of the safety of the Army Air Force.
- e. Management does not encourage production of safe material but stresses only quantity production with the idea of getting it by shmehow.
- that they will not suffer criticism if they err on the side of passing questionable material but that they will be subject to criticism if they reject material. Being smart and desiring to hold their jobs they know what to do under these circumstances. They are so frequently overrulad when they reject bad material that many feel it is useless to bother.
- g. All appeals from army inspectors decisions are simed to get inferior material accepted and purchased by the Government, thereby discrediting the Government inspectors.
- h. Five highly skilled and experienced inspectors, including three supervisors were transferred unjustly under company pressure. This action is generally known throughout the plant with resultant effect upon merals.

- i. One highly skilled district supervisor has been prohibited the right to visit and inspect Wright engine plants because of making an honest stenographic record of complaints of four men who were transferred. He undertook the investigation under orders of his superior.
- 12. There is no real company management on the premises. Wright

  Aeronautical attempts to run the plant from Paterson, New Jersey.
- 13. There does not appear to be competent management on the lower levels.
- 14. The plant appears to be excessively over-managed and over spaced.
- 15. Waste of manpower at the plent is quite apparent.
- 16. There is no evidence of labor trouble at the plant.
- 17. Company officials, government inspectors, Army officers deliberately withheld information from the Subcommittee and evaded the Subcommittee's questions.
- 18. The Army personnel, Army officers and inspectors attempted to suppress evidence and to intimidate witnesses. They deliberately deceived the Committee with respect to the existence of important documents. Several of them admitted facts only after hours of intensive cross examination during which they told conflicting stories. The top officer present, Lt. Colonel Greulich, participated in all of these attempts to conceal the facts from the Committee. Activities of this kind block honest investigation and give impetus to the claim that corporations such as this cannot be touched. With the present setup, the Committee feels the Army Air Forces cannot ever achieve self-dicipline in a matter of this kind.

- 19. There is a definite fear of reprisel amongst both government and company employees. Some government inspectors appear to have lost night of the fact that they are representing the government and not the company. The Subcommittee felt the existence of a definitely nurtured feeling that the company is so big and its political influence so great as to dominate the government in these transactions and that the company's ill-will will cause the loss of employees' jobs.
- 20. This is a glaring example of the concentration of contracts in new plants with inexperienced management trying to get out a large production and ruthlessly slashing quality to maintain profits and schedules in the fact of excessive production costs caused by poor management. The company has been furnished with the finest plant and machinery available at government expense. By permitting variations to be made from blueprint tolerances without changing the specifications, the government is maintaining the myth of precision manufacture for the company's benefit and placing the entire responsibility for quality on the Army Air Forces without fixation of individual responsibility. Assuming an amount of variance to be justified, the method pursued by its very irresponsibility opens the door to widespread abuse without either control or remedy, produces an utter lack of uniformity between plants and materially affects the interchangeability of parts in the field. The Subcommittee feels that if the deviation from tolerances permitted by the government inspectors in this plant are sound, it is apparent that the government has been hood-

winked by phoney sales talks on precision into the now existing concentration of airplane engine production in a few selected companies. This deduction is justified by the fact that the variances from tolerances are always authorized verbally without being reduced to writing or changed in the specifications.