(Hand written at top of page) C.O. AAF Technical School, Boca Raton, Fla.

Undated project report

SUBJECT: AN/APQ-7, Fifteenth Air Force -- Report #5

1. Since the report of 20 April 1945 by the undersigned officers, the following progress has been achieved.

2. A total of twenty-three B-24-M aircraft and one B-17-G aircraft has been received. Three B-24-M planes, 442332, 442345, 442347, are assigned to the 455th Bomb Group of the 304 Bomb Wing. Three B-24-M planes, 442417, 442354, 442359, are sassigned to the 459 Bomb Group of the 304 Bomb Wing. The remainder of the planes will not be used in this theater and are awaiting disposition elsewhere.

3. A preliminary examination of all twenty-four planes indicates that none of the antenna vanes suffered damage during landings made in this theater. The troubles noted in paragraph 7 of the 20 April 1945 report are frequent however.

a. All twenty-four PU-7/AP inverter installations evidence dents in the housing over the end cooling fan.

b. Four of the B-24-M installations exhibit broken fairing of vane mounting struts. This condition, noted on aircraft 2326, 2342, 2349, 2360, is found only at the leading edge lower flare where the strut fairing mates with the vane structure.

4. Fifteenth Air Force has elected to keep six B-24-M Eagle planes solely for the purpose of obtaining comparative data on the performance of Eagle and Mickey (APS-15A) equipments under field conditions. It will probably be impossibleto use AN/APQ-7 for any combat missions due to curtailed stategic demands. An extension of orders for the undersigned has been requested by Air Force for the purpose of assisting in this field test program. In addition to giving additional maintenance instruction to personnel of the Radar Section of the 459 Bomb Group, it will be necessary to aid in the instruction of Navigators who will operate the APQ-7 equipment. Any data obtained during the test which may be valuable from a maintenance or design standpoint will be carefully noted and submitted as it becomes available.

5. It is very unfortunate that the standard APQ-7 camera installation is not available for these tests. However, an attempt will be made to utilize the 16mm Fairchild cameras now used with the APS-15A and a modified K-20 camera. The importance of recorded scope presentation cannot be over-emphasized. Future program establishments contemplated for AN/APQ-7 should definitely incorporate cameras with initial equipments.

6. Since no B-17 Eagle planes will be used by the Fifteenth Air Force, the bench set and test equipment previously installed at the 2d Bomb Group of the 5th Bomb Wing have been moved to the 459 Bomb Group to enable maintenance of the Eagle planes currently assigned there.

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7. Owing to the limited program, it will not be necessary to keep all the APQ-7 equipment now in the theater. It has been decided to retain all ten antenna vane assemblies plus five complete "A" and "B" part groups. The other eight sets of "B" parts and any equipment which may be in transit -- except PU-7/AP Inverters, Nosmeagle, and camera equipment -- will be released for shipment elsewhere.

8. A copy of letter ATSC 413.44 (25 APR 45), subject "Maintenance Program for Radio Set AN/APQ-7 in XV Air Force" was received 6 May 1945. The projected maintenance program detailed therein is exceedingly well developed. The careful planning is greatly appreciated by all concerned and, had the strategic demands continued, would definitely have provided an adequate foundation for Fifteenth Air Force Eagle operations. As suggested in reference letter, extensive use will be made of Radar Report Forms 38, 38A, 38B, 38C during the Field Test programs.

9. With the continued cooperation of all concerned, it is believed possible to complete the Firld Test program and all maintenance training within the next 30 days. Detaild reports will continue to be forthcoming.

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