French railway authorities indicated very clearly that pre-D-Day attacks achieved the purpose intended. The Nazi controlled transport system was very badly disorganised. It had therefore, become extremely vulnerable to the attention of the medium and fighter bombers, which, in the periods just before and after the assault, caused great destruction to immobilised rolling stock.

74. *Attacks on Locomotive Power.*—Attack on repair depots and facilities was the main method of achieving the desired reduction in traction power. It was accepted that these attacks would, at the same time, damage and destroy locomotives. For example, in one such attack, about five per cent. of the locomotives in the Region Nord were put out of service. In addition, however, it was planned to attack directly trains and locomotives on open lines.

75. I first initiated special large scale fighter sweeps against trains and locomotives in Northern France and Belgium on 21st May, 1944. On this day, concentrated efforts were made in certain areas in France, with some attention to connections from Germany and Belgium. Fighters of A.E.A.F. and the United States Eighth Air Force swept over railway tracks covering a very wide area and created havoc among locomotives, passenger trains, goods trains and oil wagons.

76. On this day, 21st May, 504 Thunderbolts, 233 Spitfires, 16 Typhoons and 10 Tempests of A.E.A.F. operated throughout the day, claiming 67 locomotives destroyed, 91 locomotives damaged and six locomotives stopped. Eleven other locomotives were attacked with unknown results and numerous trains were attacked and damage inflicted on trucks, carriages, oil wagons, etc.

77. On this same day, United States Eighth Air Force Fighter Command sent out 131 Lightnings, 135 Thunderbolts and 287 Mustangs against similar targets in Germany. They claimed 91 locomotives destroyed and 134 locomotives damaged. In addition, one locomotive tender, six goods wagons and three box cars were destroyed, whilst seven goods wagons, seven trains, three rail cars, four box cars and thirteen trucks were damaged, and sixteen trains set on fire.

78. From 22nd May to D-Day, A.E.A.F. flew 1,388 sorties with the primary purpose of attacking locomotives. In this period they claimed 157 locomotives destroyed and 82 damaged, as well as numerous trucks.

79. On 25th May, United States Eighth Air Force Fighter Command flew 608 sorties over France and Belgium, with the result that 41 locomotives, 1 troop train with approximately 300 men and 19 trucks were destroyed, and 25 locomotives and 50 trucks were damaged. Though outside the " Neptune " area, it is interesting to record that on 29th May, aircraft of Eighth Air Force Fighter Command flew 571 sorties over Eastern Germany and Poland, attacking 24 locomotives, 32 oil tank cars, 16 box cars and 3 freight trains with unobserved results. In addition to these special attacks, aircraft of Eighth Air Force Fighter Command frequently attacked locomotives and trains amongst other ground targets, when returning from escorting heavy bombers.

80. The total effort by fighters against rolling stock from 19th May to D-Day was as under:—

A.E.A.F.	2,201 sorties
U.S. Eighth Air Force ...	1,731 sorties
	3,932 sorties

81. With the capacity and flexibility of the enemy rail system destroyed, the enemy armies in the field were denied the freedom of movement necessary to mount decisive counter-attacks. Further, the enemy armies and their supplies were forced on to the roads, thus not only slowing up their movement and making them more vulnerable to air attack, but also by compelling the enemy to use motor transport making him draw more heavily on his precious reserves of oil and rubber. Air attacks on these road movements eventually forced the enemy to move mainly by night.

82. During the assault and post-assault phases, this stranglehold on the enemy rail communications was effectively maintained. Details of the attacks involved and some evidence of the delay produced in the enemy build-up are given in Part III (*c*) of this Despatch.

83. *Destruction of Bridges.*—As I have already explained, complementary to the plan to destroy, by air attack, the enemy's rail motive power, I planned also to endeavour to destroy all the principal rail and road bridges leading into the assault area. If these were destroyed, not only would the enemy's rate of build-up in that area be further checked and his flow of reinforcements and supplies be further impeded, but also his ability to escape rapidly from the assault area in the event of his being forced to retreat would be very seriously impaired. The implications of the attacks on bridges were, therefore, somewhat wider than those of the other attacks on his communications system. In conjunction with these other attacks, the attacks on bridges were designed to seal off the assault area and so force the enemy to stand and fight, and since he could not easily retreat, any defeat would be decisive.

84. A bridge is, by nature of its size, very difficult to hit and, by nature of its construction, even more difficult to destroy completely. Calculation suggested that approximately 600 tons of bombs per bridge would be needed if the task were entrusted to heavy bombers. In fact, it was found that an average of 640 tons of bombs per bridge was needed. What was not at first realised was how effectively, and relatively cheaply, the task could be carried out by fighter bombers. It was learnt from the attacks on bridges by the aircraft of A.E.A.F. that a bridge could be destroyed for the expenditure of approximately 100 sorties, that is between 100 and 200 tons of bombs.

85. In order not to betray a special interest in the " Neptune " area, attention was paid in the preparatory phase principally to the bridges over the Seine, with some others over the Oise, Meuse and the Albert Canal, leaving to the assault phase the task of attacking bridges south of Paris to Orleans and west along the Loire.

86. On 21st April, 1944, the first of a series of attacks against bridges was made by Typhoons. Subsequent attacks were carried