

~~CONFIDENTIAL~~

EXHIBIT B

EXHIBIT B (Page 2)

PROJECT P.P.F.  
P-38 Series Airplanes (Project Officer Captain R.F. Stemen (Tel 2-2107))

- General: (a) 1000 sets of parts required.  
(b) Estimated time for installation per airplane - 65 man-hours.

ITEM 1 - SPARK PLUGS

- (a) Reason - Presently used spark plugs are not suitable for use at 70" to 75" of manifold pressure. Therefore, new plugs, Types LS-82 (AG-433M) or Champion P-438 are required for this project. A total of 364,000 plugs are required, comprised of 288,000 LS-82 plugs and 76,000 P-438 plugs.
- (b) ASC Emergency Request Numbers: 3E-9294-80-PPF for Champion plugs  
3E-9277-80-PPF for AG433M plugs
- (c) Status of Shipments:  
Only 13,000 AC plugs will be available at Newark in time for 24 April 44.  
63,000 plugs will be available by 30 April 44.  
An additional 42,000 per week thereafter.  
LS-86 plugs may be used in an emergency.  
Shipments of these two plugs will run on into June.
- (d) Weight and cubage: 200 plugs per carton; 1820 cartons; 118,300 lbs. total; 2439 cubic feet.
- (e) Recommend that these plugs be shipped overseas promptly and held there by Air Service Command until they are needed for use on this project.

ITEM 2 - COOLANT SYSTEM PRESSURIZATION KITS

- (a) Reason - To provide better flow of coolant at high altitudes. A total of 900 kits will be required for airplanes in England. These are required soon as possible on all P-38 airplanes, regardless of Project P.P.F.
- (b) ASC Emergency Request No. 3E-9250-80.
- (c) Status of Shipments:  
600 sets have been shipped to England,  
300 more were at Newark 1 April awaiting shipment on the fast boat.

~~CONFIDENTIAL~~



~~CONFIDENTIAL~~

EXHIBIT B (Page 2)

- (d) **Weight and Cubage:** None required because these shipments are going in advance of 24 April.
- (e) **Installation Instructions:** Instructions packed with each kit. Also, the 8th and 9th Air Forces are issuing or have issued instructions for installation of these kits in all P-38 airplanes.

ITEM 3 - CARBURETOR CHANGES

- (a) **Reason** - These changes are required to allow full fuel flow at 75" manifold pressure. Change consists of installing 0.25-inch dia. fuel nozzles and 2400 cc power enrichment jets.
- (b) ASC Emergency Request No. 3E-9283-RO-PPF.
- (c) **Status of Shipments:**  
2000 sets of fuel nozzles and power jets will be delivered to Newark by 20 April. First shipments to be made on 12 April.
- (d) **Weight and Cubage:** 127 cartons, 6100 lbs total, and 157 cu. ft. total.
- (e) Recommend prompt shipment overseas, along with rest of items to avoid getting lost. ASC to hold these until needed for Project P.P.F.

ITEM 4 - FUEL SYSTEM CHANGE

- (a) **Reason** - To provide fuel flow required at high powers used. Change consists of installing Type B-7A fuel boost pumps on sumps of main fuel tanks.
- (b) ASC Emergency Request Numbers: Type B-7A Pumps - 3E-9276-RO-PPF. Parts and Service Bulletins from Lockheed - 3E-9293-RO-PPF.
- (c) **Status of Shipments:**  
Type B-7A pumps; 620 shipped as of 12 April.  
Remaining 1380 to be shipped by 18 April  
Parts and Service Bulletins - no data available but expected by 20 April, packed with Item 5.

~~CONFIDENTIAL~~



~~CONFIDENTIAL~~

- (d) Weight and Cubage: Type B-7A Pumps - 112 cartons, 13125 lbs. total 475 cu.ft. total.
- (e) Recommend prompt shipment overseas of these pumps and the Lockheed furnished parts for them, so they can be installed now. Their installation will not interfere with normal functioning of the airplane.

ITEM 5 - TURBO REGULATOR LINKAGE

- (a) Reason - Necessary to readjust turbo regulator to provide for operation up to 75" manifold pressure. Parts required consist of additional linkage for turbo regulator control. Service bulletin also required.
- (b) ASC Emergency Request Number: 3E-9293-RO-PPF.
- (c) Status of Shipments: No date available but expected by 20 April 1944.
- (d) Weight and Cubage: 250 cartons, 12,000 lbs. total, 3750 cubic feet total.
- (e) Recommend prompt shipment overseas because the Lockheed parts for Item 4 are included in this kit and should be installed promptly. The turbo regulator linkage itself to be held there by ASC until needed for Project P.P.F.

F-47 Series Airplanes: (Project Officer Captain R.S.Foulger Tel. 2-2237)

- General:
- (a) 1300 sets of parts required.
  - (b) Estimated time required for installation per airplane - 100 man-hours.

ITEM 1 - TURBO REGULATORS (A-23 required to replace the A-17).

- (a) Reason - Necessary to obtain higher manifold pressure.
- (b) ASC Emergency Request No. 3E-9266-RO-PPF.
- (c) Status: Eclipse has promised 2000 converted A-23's from their subcontractor, Evinrude, during month of April. AAA-1 has been acknowledged by Eclipse.

~~CONFIDENTIAL~~