

CONFIDENTIAL

20. (C) IOM 16 May 1942

Fr: Col. F.O. Carroll

Chief, Exp. Eng. Sect., WF

To: Chief, Prod. Eng. Sect., WF

Attn: Attack Br.

(File: Bomb. Br., Eng. Div.)

Exp. Eng. Sect. (WF) made a comparison of approximate gross weight, useful load, and range data of the XA-26, the XA-26B, and the modified XA-26B. The tank destroyer version, a modified XA-26B mounting one 75 mm. cannon but no range finder, was basically very similar to the XA-26 except for the removable nose and the cannon installation. Exp. Eng. Sect. believed that a relatively high percentage of the basic XA-26 attack bomber version airplanes should be maintained in production, but also stated that a few ground attack version airplanes, mounting sufficient forward fire power to be effective, might be desired.

INTER-OFFICE MEMORANDUM

WAR DEPARTMENT, AIR CORPS
Office, Assistant Chief
Materiel Division

Wright Field, Dayton, Ohio

Date: May 14, 1942

TO: Chief, Production Engineering Section, Wright Field.
Attention: Attack Branch.

SUBJECT: Contract AC-1744, IA-26B Airplane,
Modification to Tank Destroyer Type.

1. With reference to conference between Mr. R. P. Macho, Production Engineering Section, and personnel of War Department Projects, Experimental Engineering Section on May 8, 1942, the following information is transmitted.

2. Approximate gross weight, useful load and range data on the IA-26, IA-26B, and the modified IA-26B airplanes are contained in the table below:

Airplane	IA-26		IA-26B		Modified IA-26B		
Weight Empty	21,150		20,225		20,625		
Crew	3		4		3		
Fuel (gals.)	140	1,000	120	1,000	140	800	1,000
Bombs (lbs.)	1,200	2,500	0	0	1,200	5,000	1,200
Gross Weight	26,700	31,900	26,125	30,060	27,520	31,680	31,680
Range/Speed	890/201	1750/212	890/201	1915/206	850/202	1415/211	1750/212

- NOTE:
- The "modified IA-26B" refers to the tank destroyer version mounting one 75 mm. cannon, but no range finder.
 - Built-in tankage is 800 gallons. 200 additional gallons may be carried in the bomb-bay tank.
 - In no case should the gross weight exceed 32,000 lbs.
 - By reason of questionable weights of the 75 mm. installation, the above weights should be regarded as approximate only.

Signature: _____

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Chief, Production Engineering Section,
Contract D-17946
May 14, 1942

3. The changes necessary to the A-26B to convert it into a tank destroyer are relatively minor. All range finding equipment and the range finder operator need only to be removed. In order to carry bombs, however, the bomb carrying gear and bomb controls must be replaced since they are not carried in the A-26B airplane. The result is a basic airplane very similar to the A-26 except for the removable nose section and the cannon installation. No bomb sight could be carried. However, the pilot could be supplied with the removable pilot's bomb control box now being developed by Douglas Aircraft Company, Inc.

4. In the case of the A-26B airplane, which has a range finder and is intended for employment against aircraft, it is necessary that the Minneapolis-Rossignol equipment (ARCE) be included for use with the fire control equipment. This feature, however, may be dispensed with on the production tank destroyers if operation of the airplane without an automatic pilot is considered feasible.

5. The present version carries some armor plate in front of the pilot, gun loader, and 75 mm. ammunition. This armor should be increased on the anti-tank airplane.

6. At present the cannon ammunition carried is 20 rounds. For the purpose of attacking armored ground objectives, the number of rounds should be increased. If this is done fewer bombs can be carried.

7. By reason of the attractive performance contemplated for the A-26 airplane, as an attack bomber, it is believed that conversion to a general purpose ground attack airplane should not be made on a large scale basis. A few ground attack versions, mounting sufficient forward fire power to be effective, may be very desirable. However, it is believed that a relatively high percentage of the basic attack bomber version should be maintained in any production program.

8. In the event that production of some of the ground attack versions is undertaken, it is highly recommended that the forward fire power be made sufficient to be compatible with the potentialities of the airplane. Armor protection should be installed for forward protection of the pilot and the vital parts of the power plants. Control of the bombs can be effected by the removable pilot's bomb control box mentioned above. ARCE will not be necessary.

F. O. CARROLL,
Colonel, Air Corps,
Chief, Experimental
Engineering Section.

Signature _____