Description. Three (3) A-36 type aircraft were received at this station on 23 November 1942. One (1) A-36 airplane was lost as the result of the wings pulling off in a vertical dive. Complete tests on dive bombing were not carried out due to restrictions placed on diving speeds and pull-outs by the Materiel Center, Wright Field, Dayton, Ohio.

Conclusions:
It is concluded that:
- a. The A-36 airplane is an excellent minimum altitude bombing and attack aircraft.
- b. The A-36 airplane is an inferior dive bomber due to the fast diving speeds at angles of dive greater than seventy (70) degrees.
- c. The A-36 airplane, after jettisoning its bombs, is an excellent fighter aircraft at low altitudes.

Recommendations:
It is recommended that:
- a. The A-36 airplane be utilized as a minimum altitude attack bomber.
- b. All A-36 type aircraft be equipped with the A-1 variable reflector sight.
- c. The dive brakes be eliminated.
- d. Flame dampers be installed for night operation.

Performance:
(1) Maximum speed without bombs at the critical engine altitude of five-thousand (5,000) feet is approximately three-hundred-twenty-four (324) miles per hour at war emergency power.
(2) Maximum speed with two (2) five-hundred (500) pound bombs at the critical engine altitude of five-thousand (5,000) feet is approximately two-hundred-ninety-eight (298) miles per hour at war emergency power.

Diving Characteristics:
The A-36 has excellent diving characteristics from the standpoint of a fighter, but it dives too fast for a dive bomber, the dive brakes slowing the airplane down approximately eight-three (83) miles per hour. This is insufficient from the dive bomber standpoint, as the airplane will still dive with the dive brakes open to speeds in excess of four-hundred-fifty (450) miles per hour, necessitating bomb release at approximately four-thousand (4,000) feet in order to pull out of the dive. The best diving angle is approximately seventy (70) degrees.

Flying Characteristics:
The A-36 is very pleasant to fly, being extremely stable on each axis. The controls are well balanced with little tendency to tighten up at high speeds. The airplane handles well in acrobatics and gives ample warning of a stall.

Prepared by: (signed)
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