STANDARD AIRCRAFT CHARACTERISTICS

AJ-2P "SAVAGE"

NORTH AMERICAN

DECLASSIFIED
POWER PLANT

NO. & MODE................. (2) R-2600-LH 4
(1) J-33-A-40
MFR..................Pratt & Whitney, Allison
SUPERCH............1 Stg., 1 Spd. 6 Turbo
TURBO...............R-2600-75S, R-2600-71
PROP. GEAR RATIO...........0.350
PRPF. MFR..............Salm. Std.
PRPF. SPD. NO............RPM75S-2440
NO. BL/SHA................4/15' - 1'

RATINGS

T.O. 2,000 2,800 S.L.
MIL. 2,000 2,800 30,000'\(1\)
NORM. 1,800 2,500 37,600'\(1\)
LSS. 4,600 11,750 S.L.
MIL. 4,600 11,750 S.L.
NORM. 3,900 11,250 S.L.

SPEC. NOS. M-8127-3 and 258-D

MISSION AND DESCRIPTION

The AJ-2F is a carrier-based photo-reconnaissance airplane developed from the AJ-1 airplane. It will be used for both day and night photographic missions.

Principal differences from the AJ-1 are: larger vertical tail; no windshield in horizontal tail; nose section of fuselage modified to provide camera port; overall length 2 feet greater; smaller bomb bay; and camera stations immediately aft of bomb bay.

DEVELOPMENT

Nokupa date ................. January 1951
First Flight ................. March 1952
Service use ................ April 1952

DIMENSIONS

WING AREA...............8.36 sq. ft.
WINGSPAN...............77-3/4 - 5'\(2\)
WINGSPAN(with tip tanks)......75-3/4 - 0'\(2\)
WING SPAN(folded)...........65'\(3\) - 2'
LENGTH..................65'\(3\) - 1'
HEIGHT...................21' - 4'
HEIGHT(folded)..............17' - 2'
HEIGHT(folded with tip tanks)......11' - 2'
PROP. CLEARANCE...............11 - 2'
R.A.G...................12' - 5'

WEIGHTS

LOADING LBS. LIF.
EGGTT............31,000
BASIC..............30,500
DESIGN..............48,000
CONBAT..............46,650
MAX.T.O. (Field)......31,600
(Cat.) 23,600
MAX.LAND. (Field)......45,000
(Arrival) 37,500

All weights are actual

FUEL AND OIL

GALS. NO. TANKS LOCATION
1,016 6 Wing, S.S.
600 2 Tip, Drop
461 2 Fuel, S.S.
425 1 B.R., Drop

FUEL GRADE..............115/140
FUEL SPEC. ...........applicable MIL-F-5572

OIL

CAP. (Gal.) 92.06 3

OIL GRADE..............1100 1010 1050
MIL. SPEC. 0-6082 0-6081 0-6082

ELECTRONICS

RF.............AV/ARQ-27
RANGE REC..........AV/ARQ-5
HOMING............AV/ARQ-2A
MARCOMPS............AV/ARQ-6
MARKER BEACON........AV/ARQ-12
HP REC............AV/ANQ-15A
HP TRANSMITTER........AV/ATQ-13
IFF.............AV/APX-6
ALTIMETER........AV/APS-12 -22
INTERPHONE........AV/ACP-24
ALTIMETER-HIGH ALT........AV/CH-7180
SEARCH RADAR........AV/ARQ-31A
RADIO BOMBS........AV/ARQ-21

Provisions for:
VF............AV/ARQ-1 or -1A

30 JUNE 1957
# PERFORMANCE SUMMARY

<table>
<thead>
<tr>
<th>TAKE-OFF LOADING CONDITION</th>
<th>(1) NIGHT RECONNAISSANCE</th>
<th>(2) DAY RECONNAISSANCE</th>
<th>(3) DAY RECONNAISSANCE</th>
<th>(4) NIGHT RECONNAISSANCE</th>
<th>(5) DAY RECONNAISSANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAKE-OFF WEIGHT</td>
<td>lb.</td>
<td>60.256</td>
<td>60.256</td>
<td>60.256</td>
<td>66.986</td>
</tr>
<tr>
<td>Fuel (Fixed/Drop)</td>
<td>lb.</td>
<td>8,862/2,660</td>
<td>8,862/2,660</td>
<td>8,862/2,660</td>
<td>8,862/2,660</td>
</tr>
<tr>
<td>Load (Camera/Torpedo)</td>
<td>lb.</td>
<td>784/2,669</td>
<td>784/2,669</td>
<td>784/2,669</td>
<td>784/2,669</td>
</tr>
<tr>
<td>Wing loading</td>
<td>lb./sq.ft.</td>
<td>60.1</td>
<td>60.1</td>
<td>55.3</td>
<td>52.7</td>
</tr>
<tr>
<td>Stall speed - power-off</td>
<td>kn.</td>
<td>103.9</td>
<td>104.6</td>
<td>92.3</td>
<td>93.1</td>
</tr>
<tr>
<td>Take-off run at S.L. - calm (4)</td>
<td>ft.</td>
<td>2,200/1,060</td>
<td>2,275/1,430</td>
<td>1,650/1,000</td>
<td>1,405/850</td>
</tr>
<tr>
<td>Take-off run at S.L. 25 km. winds (4)</td>
<td>ft.</td>
<td>1,300/750</td>
<td>1,350/780</td>
<td>875/520</td>
<td>750/425</td>
</tr>
<tr>
<td>Take-off to clear 50 ft. - calm</td>
<td>ft.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Max. speed/altitude (8)</td>
<td>kn./ft.</td>
<td>300/26,000</td>
<td>295/26,000</td>
<td>314/30,000</td>
<td>323/30,000</td>
</tr>
<tr>
<td>Rate of climb at S.L. (8)</td>
<td>kn.</td>
<td>970</td>
<td>900</td>
<td>1,175</td>
<td>1,320</td>
</tr>
<tr>
<td>Time: S.L. to 10,000 ft. (8)</td>
<td>min.</td>
<td>12.7</td>
<td>13.5</td>
<td>10.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Time: S.L. to 20,000 ft. (8)</td>
<td>min.</td>
<td>28.0</td>
<td>30.2</td>
<td>22.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Service ceiling (100 fps)</td>
<td>ft.</td>
<td>3,250</td>
<td>3,000</td>
<td>3,500</td>
<td>3,600</td>
</tr>
<tr>
<td>Combat range</td>
<td>n.m.i.</td>
<td>1,880</td>
<td>2,365</td>
<td>1,265</td>
<td>1,380</td>
</tr>
<tr>
<td>Average cruising speed</td>
<td>kn.</td>
<td>230</td>
<td>242</td>
<td>237</td>
<td>234</td>
</tr>
<tr>
<td>Cruising altitude(s)</td>
<td>ft.</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Combat radius</td>
<td>n.m.i.</td>
<td>860</td>
<td>1,080</td>
<td>545</td>
<td>590</td>
</tr>
<tr>
<td>Average cruising speed</td>
<td>kn.</td>
<td>207</td>
<td>209</td>
<td>210</td>
<td>210</td>
</tr>
<tr>
<td>Mission time</td>
<td>hr.</td>
<td>8.3</td>
<td>10.6</td>
<td>5.4</td>
<td>5.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMBAT LOADING CONDITION</th>
<th>(2) Flash Bombs retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMBAT WEIGHT</td>
<td>lb.</td>
</tr>
<tr>
<td>Engine power</td>
<td>Dry M11.411 Eng.</td>
</tr>
<tr>
<td>Fuel</td>
<td>lb.</td>
</tr>
<tr>
<td>Combat speed/combat altitude</td>
<td>kn./ft.</td>
</tr>
<tr>
<td>Rate of climb/combat altitude</td>
<td>fps/ft.</td>
</tr>
<tr>
<td>Combat ceiling (500 fps)</td>
<td>ft.</td>
</tr>
<tr>
<td>Rate of climb at S.L.</td>
<td>fps</td>
</tr>
<tr>
<td>Max. speed at S.L.</td>
<td>kn.</td>
</tr>
<tr>
<td>Max. speed/altitude</td>
<td>kn./ft.</td>
</tr>
</tbody>
</table>

| LANDING WEIGHT              | lb.                       | 36,124                   |
| Fuel                        | lb.                       | 989                      |
| Stall speed - power-off     | kn.                       | 80.4                     |
| Stall speed - with approach power | kn.                   | 75.6                     |

**NOTES**

- **REASONS FOR REISSUE**: Performance data completely based on KATTECHEN Flight Test Data.
- **COMBAT RANGE and RADIUS** are based on Flight Test Data. Fuel consumption increased by 5%.
- **Tip tanks are carried at all times. (Cruising fuel consumption is better with tip tanks on than with tip tanks off).**
- **SPOTTING**: A total of 22 airplanes can be accommodated in a landing spot on the flight and hangar decks of a GVA-19 class angled deck carrier.

**AJP-2P**

**CONFIDENTIAL**

30 JUNE 1957
HIGH ALTITUDE RECONNAISSANCE COMBAT RADIUS PROBLEM

WARM-UP, TAXI, TAKE-OFF: Reciprocating engines; 10 minutes at normal rated power at sea level. Jet engines: 5 minutes at normal rated power at sea level.

CLIMB: On course to 25,000 feet at normal rated power. Jet off.
CRUISE-OUT: At 25,000 feet at V for long range. Jet off. Tip tanks retained.
CLIMB: On course to 30,000 feet at normal rated power. Jet off. Climb ends 87 nautical miles from target.
CRUISE-OUT: 43.5 nautical miles at 30,000 feet at V for long range. Jet off.
RUN-IN: 43.5 nautical miles at 30,000 feet at military rated power, all engines.
DROP FLARES, TAKE PHOTOGRAPHS
RUN-OFF: 43.5 nautical miles at 30,000 feet at military rated power, all engines.
DESCEND: To 10,000 feet. (No fuel used, no distance gained).
CRUISE-BACK: At 10,000 feet at V for long range. Jet off.
DESCEND: To 1,500 feet. (No fuel used, no distance gained).
RESERVE: 30 minutes at V for long range at sea level (Jet off) plus 5% of initial fuel load.

COMBAT RADIUS = CLIMB + CRUISE-OUT + CLIMB + CRUISE-OUT + RUN-IN = RUN-OFF + CRUISE-BACK
MISSION TIME = CLIMB + CRUISE-OUT + CLIMB + CRUISE-OUT + RUN-IN + RUN-OFF + CRUISE-BACK

ORDNANCE (Continued)
1 A-10 - Motion Picture Camera (forward firing 35mm.)
2 B-1a - 35mm Radioscope Recording Camera (for APS-3A)
1 AN-W-1 - 16mm Camera (For Data Recording, Photographic runs)
3 AN-N-9 - 16mm Cameras, Quant. (for Target recording.)

SPECIAL PHOTO EQUIPMENT

MOUNT, CAMERA

Type          Location            No.
A-48 Stabilised Camera Compartment 1
Viewfinder
A-16VF        Right side cockpit 1

LOADING CONDITION COLUMN NUMBER