Characteristics Summary

FIGHTER ............... F-105C

"THUNDERCHIEF"  REPUBLIC

Wing Area ................. 385 sq ft  Length .................... 63.1 ft
Span ........................ 34.9 ft  Height ................... 19.7 ft

AVAILABILITY  PROCUREMENT
Number available  Number to be delivered in fiscal years

ACTIVE  RESERVE  TOTAL

STATUS
1. Similar to the F-105B except for addition of second flight station, reduced fuel capacity and other minor changes.

NAVY Equivalent: None

Mfr's Model: AP-63-5

POWER PLANT
† (1) J75-P-5
Pratt & Whitney
ENGINE RATINGS
S.L.S. LB - †RPM - MIN
Max: *23,500 - 6940/8860 - 5
Mil: 15,500 - 6820/8810 - 30
Nor: 13,700 - 6450/8630 - Cont

*With afterburner operating
†First figure represents RPM of the low pressure spool while the second that of the high pressure spool.
††With Republic designed Ram Air Ejector.

FEATURES
Crew ................. 2
Area control fuselage
Liquid oxygen system
Spoiler allorons
Fuselage bomb bay
L.E. Wing flaps
Drag chute
Integrated auto pilot
XMA-8 Fire control system
Engine ram air ejector
In-flight refueling (Probe & Drogue)
E-30 Tons bomb computer
Integrated electronics package
Max fuel capacity: 2705 gal

ARMAMENT
Guns ... 1 x 20mm(T171E3)
Ammunition (tot) ... 1130 rds
Rockets, *95 x 2.75" FFAR
Bombs:
Class (lb) Int Ext Load
3000 ... 2, 2x3000
2000 ... 2, 2x2000
1000 ... 4, 4x1000
750 ... 4, 4x750

Special Store
1700(TX-28) .... 1x1700

Max Bomb Size
(Int) ............... 1700 lb
(Ext) ............ 3000 lb
Max Bomb Load .. 8000 lb

*Carried in 5 pods,
19 rockets each
**Characteristics Summary Basic Mission**

**F-105C**

<table>
<thead>
<tr>
<th>Performance</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Combat Radius</strong></td>
<td>COMBAT 721 knots at zero ft alt, max power</td>
</tr>
<tr>
<td>561 naut. mi</td>
<td>MAX 1058 knots at 35,000 ft alt, max power</td>
</tr>
<tr>
<td>with 2507 lb payload</td>
<td>BASIC 721 knots at zero ft alt, max power</td>
</tr>
<tr>
<td>at 491 knots avg.</td>
<td></td>
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<tr>
<td>in 2.36 hours.</td>
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<table>
<thead>
<tr>
<th>Ceiling</th>
<th>TAKE-OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>6465 fpm sea level, take-off weight military power</td>
<td>ground run 3910 ft no assist</td>
</tr>
<tr>
<td>38,500 ft 100 fpm, take-off weight military power</td>
<td>--- ft assisted</td>
</tr>
<tr>
<td>37,600 fpm sea level, combat weight maximum power</td>
<td>over 50 ft height 4980 ft no assist</td>
</tr>
<tr>
<td>52,300 ft 500 fpm, combat weight maximum power</td>
<td>assisted</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Load</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammunition, 1130 rds/20mm Special Store(TX-28), 1750 lb</td>
<td>Empty..... 24,824 lb</td>
</tr>
<tr>
<td>Fuel: 1980 gal protected 0 %</td>
<td>Combat... 33,010 lb</td>
</tr>
<tr>
<td>droppable 49.2 %</td>
<td>Take-off 42,134 lb</td>
</tr>
<tr>
<td>external 49.2 %</td>
<td>limited by mission</td>
</tr>
</tbody>
</table>

**Stalling Speed**

167.6 knots power-off, landing configuration, take-off weight

**Time to Climb**

1.6 min S.L. to 35,000 ft, combat wt, maximum power

**Notes**

1. Performance Basis:
   (a) Contractor estimated data (Not substantiated by WADC)

2. Revision Basis: Initial Issue