

DSB Design Flight Test Centre

Lead Tester : J.P.R. Watkins



Northrop F-20A/B Tigershark



Introduction:

DSB Design started work on the F-20A Tigershark in May 2004 with the first Model arriving at the DSB Beta Test center on the 16th August, the first official test flight was flown two days later.

Flight Test Center.

Sierra Hotel – Edwards AFB, California, USA.

Flight Test Registrations.

F-20A: N3986B, 820062

F-20B: 60441

Project Director.

David Brice - DSB Company owner, Flight Test Engineer & Lead Designer

Flight Test Aircrew.

Jon Watkins – Alpha / Beta Team Manager – Flight Dynamics & Advisor

Chris Larvin - Beta Test – Design & Advisor

Shane Shrenaski - Alpha Test – Initial Model Testing



F-20A/B Flight Test Notation

assl	Standard sea level speed of sound	661Kts IAS
CrAlt	Cruise Altitude	29000ft
MxAlt	Maximum Altitude	54700ft
Mmax	Mach number at maximum thrust, 25000ft (Clean)	2.1M+
Mmrt	Mach number at military rated thrust, 25000ft	.92M
Pssl	Standard sea level pressure (F-Test)	29.92inHg
msdh/dt	Max Standard Rate of climb, sustained Sea Level	50000fpm
ROC	Standard Rate of Climb ft/m	4400fpm
ROD	Rate of descent ft/m	2600fpm
RStd	Standard day cruise range	1540nmi
RT	Total range (Ferry)	1700nmi
S1	Takeoff distance, brake release to lift off (Stores)	1,600 ft
S2	Takeoff distance, lift off to 50 ft	2000ft
S3	Landing distance, 50 ft to touchdown	150ft
S4	Landing distance, touchdown to stop	4200ft
T	Thrust – F404 GE101 Eng Ratio 7.8:1	18000lb
V50	Ground speed at 50 ft reference point	40kts IAS
VA	Maximum Maneuvering speed @ 15000ft	.80M
VAg	Maximum Ground Maneuvering speed	35kts
VAPR	Approach speed	160kts IAS
AuW	All Up Weight (Clean)	18005lbs
vAuW	Maximum All Up Weight	27500lbs
VH	Max level flight airspeed @ 29000ft -AB (Stores)	380Kts IAS (.94M)
VL	Landing Speed	135kts IAS
VL 50	Landing speed at 50 ft	126kts IAS
Vmax	Max airspeed @ 25000ft - AB (Clean)	410kts IAS
Vmc	Airspeed for minimum control	120kts IAS
Vmin	Minimum airspeed	112kts IAS
Vmrt	Military rated thrust airspeed @ 10000ft	550kts IAS (.92M)
VPA min	Minimum speed in the approach configuration	125kts IAS
VR	Rotation airspeed, With TO Flap	140kts IAS
Vs	Stall speed @ 20 deg, + Alpha – @10000ft	100kts IAS
Vs L	Stall speed, landing config, power off +10 Alpha	105kts IAS
Vs T	Stall speed, transition config, power off, flaps down, gear up 10deg +AoA	110kts IAS
VTD	Touchdown Airspeed	130kts IAS
VTO	Takeoff Airspeed, TO Flap, TO Trim	145kts IAS
Vy	Airspeed for maximum rate of climb	340kts IAS

Please take note that all Flight Testing was carried out using Microsoft Flight Simulator 2004 only.

Disclaimer: These figures may not necessarily correspond to real life Aircraft performance; they are based on simulation observations only.

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