# **Detroit LCS-7**

# Freedom class USA

BASIC SHIP DA Displacement: 284 Advance per 45° tr Standard rudo	10 std urn der: 300 ya	(\$	: 9 + 5 + 2 Speed Loss)	SENSO Radar Na SPS-75	ame	3	<u>ction Lge</u> BD 108 SS 36	77 36	55 2 32 1	2 7 8 10	hy Gen Remarks 6th
Hard rudder: 2 Accel/Tac Turn fro	m 0-75% N		(2) 12	BridgeMa	aster	N	av 48	32	18 1	0 6	4th
Accel/Tac Turn fro Decel/Tac Turn fro			6 15	<u>Sonar Na</u> None	ame	Mounting	Active	Passive	Freq	Gen	Remarks
Armor Rating: 0 Size Class: C/Sma Propulsion: CODA Signature: Small/N	G/Water je	Crew: 75 ES: 3rd of ECM: 3r	Gen d Gen D	<u>Link Nam</u> Link 16	ne npatible with	TDL Type RT h Link 11.	Surf LOS 25	Air LOS 300	Beyond LOS Relay	SATCOM Yes	Jamming Resistance 12
WEAPONS								Comba	t System:	Gen 5 Au	tomatic
F (1) Mk110 57mm GS6		<b>A EO</b> Rng (75% Hit)	Med Rng	ı (55% Hit)	Long	Rng (25% Hit)	Extre	eme Rng (15%	% Hit)		.@s
Shell <u>Type</u>	100%	vs. Belt Pen Dam	100% v kyds Pe			% vs. Belt B/D Pen Dam	<u>kyds</u>	30% vs. Belt B/D-Pen	Dam		Q # 8
HE HE	0 -	1 18	3.1 - 1		7.7 -	1/0 14	12.2 -	1/1	13		Ramos
P (1) Mk46 30mm/	3.0 /P EO GFC	;	7.6		12.1		15.1			_ /	, ) <b>%</b> , \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
S (1) Mk46 30mm/ GS6		; Rng (75% Hit)	Med Rnd	ı (55% Hit)	Long	Rng (25% Hit)	Eytre	eme Rng (15%	% Hit)	//	(a)
Shell	100%	vs. Belt	100% v	s. Belt	40	% vs. Belt		30% vs. Belt		#	<b>6</b>
<i>Type</i> HE	<u>kyds</u> 0 -	<u>Pen</u> <u>Dam</u> 0 4	<u>kyds</u> <u>Pe</u> 1.2 - 0		<u>kyds</u> <u>l</u> 2.9-	<u>B/D Pen</u> <u>Dam</u> 0/0 3	<u>kyds</u> 4.5 -	<u>B/D-Pen</u> 0/0	<u>Dam</u> 2	8	
DA (1) M2 F0 col	1.1	6 4	2.8 5	4	4.4	4/1 3	5.5	3/3	3	_	
PA (1) M2 .50 cal. SA (1) M2 .50 cal.						Low	(0.1L) (0.1L)				
GS6 Shell		Rng (75% Hit) & vs. Belt	Med Rng 100% v	ı (55% Hit) s. Belt		Rng (25% Hit) % vs. Belt	) Extre	eme Rng (15% 30% vs. Belt			
<u>Type</u>	<u>kyds</u>	<u>Pen</u> <u>Dam</u>	<u>kyds</u> <u>Pe</u>	<u>n Dam</u>	kyds L	B/D Pen Dam		B/D-Pen	<u>Dam</u>		
Solid Slug	0 - 0.2	1 0.8	0.3 - 1 0.5	0.7	0.6 - 0.8	1/0 0.6	0.9 - 1.0	1.0	0.5		
Tandem HEAT SSM. 3 -4.9 ni A (21) Mk49 w/21 I RIM-116B-1 R. Guidance: 3rd SAM. 3 - 5 nm SSM. 3 - 5 nm Aft Pad (1) MH-60f	AGM-114 ngbow Hel warhead. ( mi, Pen 76, RIM-116// AM BIk IA. Gen PRH8 ii, ATA 3.0 ii, Pen: 2, □	Ifire. 3rd Gen Can engage 1 Damage 10 IRH. VSmall.	I/TARH, VSmall, I 2 separate targets VLow-Hi. 1320 kno	per Tactical Tu	er incremer	nt) Low Supers					
Not fitted to perform  DAMAGE & SPE  Damage Points: Maximum Speed:	n Helicoptei	r Inflight Refu								after 1990.	ve cargo by UNREP.
Fire/Flooding Sever Starting Rc'vd DP DP	rity Condition on turn	ons: Remaining DP	CH S Ratio	tarting Rc'		on Remaini urn DP	ing CH Ratio				Fire/Flooding D6% Minor (01-10%) Major (11-14%) Severe (15-16%) Overwhelmed (17%+) Fire %
											Flooding%

Sioux City LCS-11

### Freedom class USA

BASIC SHIP DATA SENSORS Displacement: 2840 std In Class: 9 + 5 + 2 Radar Name **VSmall Function** Lge Med Small Stealthy Gen Remarks (Speed Loss) Advance per 45° turn 108 SPS-75 77 Standard rudder: 300 yards SS 36 32 10 36 18 Hard rudder: 200 yards (2)BridgeMaster Nav 48 32 18 4th Accel/Tac Turn from 0-75% Max Speed 12 Accel/Tac Turn from 76-100% Max Speed Sonar Name Remarks Mounting Active <u>Passive</u> Freq Gen Decel/Tac Turn from from any Speed TB-37 Towed Array Long, High Speed VLF-LMF Armor Rating: 0 Crew: 75 TDL Jammina Surf Air Bevond Size Class: C/Small ES: 3rd Gen LOS LOS Link Name LOS SATCOM Resistance Туре Propulsion: CODAG/Water jet ECM: 3rd Gen D Link 16 RT 25 300 Relav Yes 12 Signature: Small/Noisy ACM: 3rd Gen Twd LPI, Compatible with Link 11. **WEAPONS** Combat System: Gen 5 Automatic F (1) Mk110 57mm/70//DORNA EO GS6 Short Rng (75% Hit) Med Rng (55% Hit) Long Rng (25% Hit) Extreme Rng (15% Hit) 100% vs. Belt 100% vs. Belt 40% vs. Belt 30% vs. Belt Shell <u>Pen</u> kyds B/D Pen Dam B/D-Pen Type kyds Pen Dam kyds Dam kyds Dam HF 0 -18 31-1 16 77 -1/0 12.2 -1/1 13 1 14 30 7.6 12.1 15.1 PA (1) M2 .50 cal. Low (0.1L) Low (0.1L) SA (1) M2 .50 cal. GS6 Short Rng (75% Hit) Med Rng (55% Hit) Long Rng (25% Hit) Extreme Rng (15% Hit) 100% vs. Belt 100% vs. Belt 30% vs. Belt Shell 40% vs. Belt B/D Pen Dam B/D-Pen <u>Pen</u> Dam <u>Pen</u> Dam Dam Type <u>kyds</u> kyds kyds <u>kyds</u> Solid Slug 0 -1 0.8 0.3 -1 0.7 0.6 -1/0 0.6 0.9 -1.0 0.5 0.2 0.5 0.8 1.0 A (21) Mk49 w/21 RIM-116// RIM-116B-1 RAM BIK IA. Guidance: 3rd Gen PRH&IRH. VSmall. VLow-Hi. 1320 knots (11.0 nmi per increment) Low Supersonic SAM. .3 - 5 nmi. ATA 3.0 SSM. .3 - 5 nmi, Pen: 2, Damage: 17+D6/3 Aft Pad (1) MH-60R Lock-Mart Littoral Combat Ship Flight 0. Monohull. Fitted with dual stabilizers and helo recovery system. Resupply by helicopter only, not fitted to receive cargo by UNREP. Not fitted to perform Helicopter Inflight Refueling (see 4.9). -15% for aluminum superstructure and -15% for mil-civ construction standards after 1990. **DAMAGE & SPEED BREAKDOWN** 2021 Configuration 50% 90% 100% <u>None</u> 25% 75% Damage Points: 30 60 90 108 120 Maximum Speed: 40 30 20 0 Sinks Fire/Flooding D6% Fire/Flooding Severity Conditions: Minor (01-10%) Remaining СН СН Starting Rc'vd Starting Rc'vd Remaining on Major (11-14%) on DP DP DP DP DP Ratio turn DP Ratio turn Severe (15-16%) Overwhelmed (17%+)

Fire Flooding

# Wichita LCS-13

### Freedom class USA

BASIC SHIP DATA Displacement: 2840 st Advance per 45° turn Standard rudder:	300 yards	In Class: 9 (Spe	ed Loss)	Rad SP	INSORS dar Name S-75			Functi 3D SS	108 36	77 36	55 32	22 18	Stealthy 7 10	6th	Remarks
Hard rudder: 200 Accel/Tac Turn from 0 Accel/Tac Turn from 7 Decel/Tac Turn from fr	-75% Max 6-100% Ma	x Speed	(2) 12 6 15		nar Name		Mou	Nav Inting	Active	32 Passive	18 Fred	10	6 Gen R	4th emarks	
Armor Rating: 0 Size Class: C/Small Propulsion: CODAG/W Signature: Small/Noisy	Vater jet	Crew: 75 ES: 3rd Gei ECM: 3rd G ACM: None	ien D	<u>Lin</u> Lin	k Name k 16 l, Compatib	le with I	<i>Ty</i>	DL pe RT	Surf LOS 25	Air LOS 300	Beyon LOS Rela	S SA	TCOM Yes	Jamm Resista 12	ance
WEAPONS										Comba	t Syst	em: Ge	n 5 Aut	omatic	
F (1) Mk110 57mm/70// GS6 Shell	DORNA E Short Rng 100% vs.	(75% Hit) Belt	100%	g (55% H vs. Belt len Da		Long R 40%	vs. Bei	t	Extre kyds	eme Rng (15 30% vs. Beli B/D-Pen	% Hit)			88	
HE 0	) - 1	18		1 1			1/0	14	12.2 -	1/1	13		/	<b>A</b>	Ramos
P (1) Mk46 30mm//P E	.0 O GFC		7.6		12	2.1			15.1				/	• ] <b>@</b> _	g /
S (1) Mk46 30mm//S E GS6 Shell Type ky HE 0 1. PA (1) M2 .50 cal.		Belt	100% <u>kyds</u> <u>P</u> 1.2 -	g (55% H vs. Belt l <u>en Da</u> 0 3 5 4	<u>ky</u> 3 2.	<u>rds</u> <u>B/L</u> .9-	vs. Bei <u>D Pen</u> 0/0 4/1	t <u>Dam</u> 3 3 <b>Low (0</b> .	<u>kyds</u> 4.5 - 5.5 <b>1L)</b>	eme Rng (15 30% vs. Bel <u>B/D-Pen</u> 0/0 3/3		<u>1</u>			
Shell <u>Type ky</u>	Short Rng 100% vs.	Belt <u>Dam</u>	100% <u>kyds</u> <u>P</u>	g (55% H vs. Belt len <u>Da</u>	<u>ım ky</u>	ds B/L	Rng (25 vs. Bei <u>D Pen</u>	lt <u>Dam</u>	Extre	eme Rng (15 30% vs. Bel <u>B/D-Pen</u>	t <u>Dan</u>				
		0.8	0.3 - 0.5	1 0.		6 - .8	1/0	0.6	0.9 - 1.0	1.0	0.5				
NSM. 4th Gen I&S SSM. 1.6 - 108 nmi	at/TIRH, VS							nic					ľ		
A (21) Mk49 w/21 RIM- RIM-116B-1 RAM I Guidance: 3rd Gen SAM3 - 5 nmi, AT SSM3 - 5 nmi, Pe Aft Pad (1) MQ-8B Fire	-116// BIk IA. □□ n PRH&IRH TA 3.0 en: 2, Dama	. VSmall. VLo	ow-Hi. 1320 kr			-		upers							
REMARKS Lock-Mart Littoral Comb Not fitted to perform He														e cargo b	y UNREP.
DAMAGE & SPEED		DOWN 5% 50	1% 75%	90		<u>0%</u>						2	021 Co	nfigura	tion
	10 (Conditions:		0 90 0 10 CH S Ratio	Starting DP		20 nks on turr		emaining DP	g CH Ratio					Minor (0 Major (1 Severe	
l— — :							= :								

### MH-60R Seahawk

### ASW USA

**BASIC AIRCRAFT DATA** Man Rtng: 2.0/1.5 Size/Signature: Small/Small Inflight Refuel: --Cruise Range: 375 nmi Bombsight: --

Countermeasures: 3rd Gen D

**SENSORS** 

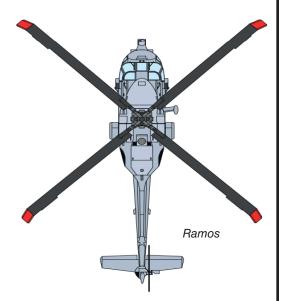
Radar Name	Function	Lge	Med	Small	VSmall	Stealthy	Gen	Remarks
APS-147/153	SS	120	100	57	32	18	5th	

Sonar Name	Mounting	Active	Passive	Freq	Gen	Remarks	
AQS-22F	Dipping	4.0	1.4	LMFa-MF	6th		
SSQ-62 F DICASS	Buoy	2.2		MFa	7th	Directional	
SSQ-53G DIFAR	Buoy		2.5	VLF-LMF	7th	Directional	
	TDL	Surf	Air	Beyond		Jamming	
Link Name	Туре	LOS	LOS	LOS	SATCOM	Resistance	
Link 16	RT	25	300	Relay	Yes	12	
				-			

LPI, Compatible with Link 11.

4th Gen FLIR. Allows ID by type/class within range, FOV is  $12^*$  for search,  $3^*$  for classification. 3rd Gen ESM. Detects radiating radar; range is 150% of the radar horizon between the two units. Detects radiating weapons directors. Detects missile active radar seeker when it is turned on (at 5 nmi).

PERFORMANCE				Helicopter
	Cruise	Full Mil.	Reheat	
Low:	100	140		
Med:	100	125		



Ceiling: 4525 m

Engine Type: TS

Damage Value: 18

SQR-17 Datalink allows sonobuoy data to be processed on board the aircraft's mother ship as long as the aircraft maintains radar LOS.

WEAPON LOADOUTS				Max Payload: 1480 kg
Hardpoint Location:		FUS1 Fwd	FUS2 Aft	
Rating (kg):		???	???	
Ordnance	Weight			
Mk46 Mod 5A(SW)	231			3rd Gen Active/Pass, 52 DP vs. sub, Max depth Deep I, Shallow Water Cap. Thermal, Contact-fuzed
Mk50 torp	363			4th Gen Active/Pass, 52 DP vs. sub, Max depth Deep V, Shallow Water Cap. Thermal, Contact-fuzed
Mk54 torp	285			4th Gen Active/Pass, 52 DP vs. sub, Max depth Deep I, Shallow Water Cap. Thermal, Contact-fuzed
AGM-114K	46	4x		3rd Gen SALH, 0.3 - 4.9 nmi, 772 kts, 15 + D6/3 damage, pen 107, Top Attack, VSmall signature
AGM-114M	48	4x		3rd Gen SALH, 0.3 - 4.9 nmi, 772 kts, 15 + D6/3 damage, pen 1, Top Attack, VSmall signature
LAU-61 rocket pod	111			19*2.75 in FFAR
120 USG Drop tank	370			75 nmi range add

#### Ordnace Loadouts:

- 1 120 USG fuel tank, 2 Mk50 torpeodes
- 2 120 USG fuel tanks, 4 AGM-114K/M Hellfire II
- 3 120 USG fuel tanks or 3 Mk50 torpedoes
- 2 120 USG fuel tanks, 8 Hellfire or 2 Mk50/54 torpedoes
- 3 120 USG fuel tanks, 4 Hellfire or 1 Mk50/54 torpedoes
- 4 120 USG fuel tanks or 4 Mk50/54 torpedoes
- 2 120 USG fuel tanks, 4 Hellfire, 1 LAU-61 w/19 APKWS
- 1 120 USG fuel tank, 1 ALQ-248 pod

Aircraft Hardpoints; Aircraft hardpoints are provided in symmetrical pairs except for centerline positions (CL), which are single. Ordnance is mounted in pairs (but may be fired singly) on UW and FUS hardpoints, with the associated double payload weight. However, especially in cases where the aircraft has only two total positions, it is not necessary to place an identical load on each side, rather a balanced load.

# **MQ-8B Fire Scout**

80

### **Patrol USA**

BASIC AIRCRAFT DATA

Man Rtng: 0.0/0.0 Inflight Refuel: --Bombsight: -- Size/Signature: VSmall/VSmall Cruise Range: 540 nmi Countermeasures: -- Ceiling: 6100 m Engine Type: TS Damage Value: 1

SENSORS

Med:

Radar NameFunctionLgeMedSmallVSmallStealthyGenRemarksZPY-4SS70704022126th

Sonar Name Mounting <u>Active</u> **Passive** Freq Gen Remarks None Jamming TDL Surf Beyond Air LOS LOS ĹOS **SATCOM** Resistance Link Name Туре None

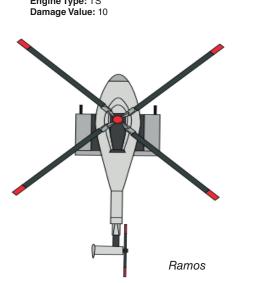
**4th Gen FLIR.** Allows ID by type/class within range, FOV is 12\* for search, 3\* for classification. **Laser Designator.** 

85

 PERFORMANCE
 UAV, VTOL

 Cruise
 Full Mil.
 Reheat

 Low:
 80
 85
 -



REMARKS

UAV, VTOL. Controlled by 110 nmi data link that is RT. Fitted with RAST.

Aircraft Hardpoints; Aircraft hardpoints are provided in symmetrical pairs except for centerline positions (CL), which are single. Ordnance is mounted in pairs (but may be fired singly) on UW and FUS hardpoints, with the associated double payload weight. However, especially in cases where the aircraft has only two total positions, it is not necessary to place an identical load on each side, rather a balanced load.