

# Detroit LCS-7

# Freedom class USA

### BASIC SHIP DATA

Displacement: 2840 std      In Class: 9 + 5 + 2  
 Advance per 45° turn      (Speed Loss)  
 Standard rudder: 300 yards (1)  
 Hard rudder: 200 yards (2)  
 Accel/Tac Turn from 0-75% Max Speed 12  
 Accel/Tac Turn from 76-100% Max Speed 6  
 Decel/Tac Turn from from any Speed 15

Armor Rating: 0      Crew: 75  
 Size Class: C/Small      ES: 3rd Gen  
 Propulsion: CODAG/Water jet      ECM: 3rd Gen D  
 Signature: Small/Noisy      ACM: None

### SENSORS

Radar Name	Function	Lge	Med	Small	VSmall	Stealthy	Gen	Remarks
SPS-75	3D	108	77	55	22	7	6th	
	SS	36	36	32	18	10		
BridgeMaster	Nav	48	32	18	10	6	4th	

Sonar Name	Mounting	Active	Passive	Freq	Gen	Remarks
None						

Link Name	TDL Type	Surf LOS	Air LOS	Beyond LOS	Jamming SATCOM	Resistance
Link 16	RT	25	300	Relay	Yes	12

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)		
Shell	100% vs. Belt			100% vs. Belt			40% vs. Belt			30% vs. Belt		
Type	kyds	Pen	Dam	kyds	Pen	Dam	kyds	B/D Pen	Dam	kyds	B/D-Pen	Dam
HE	0 - 3.0	1	18	3.1 - 7.6	1	16	7.7 - 12.1	1/0	14	12.2 - 15.1	1/1	13

#### P (1) Mk46 30mm/P EO GFC

#### S (1) Mk46 30mm/S EO GFC

GS6	Short Rng (75% Hit)			Med Rng (55% Hit)			Long Rng (25% Hit)			Extreme Rng (15% Hit)		
Shell	100% vs. Belt			100% vs. Belt			40% vs. Belt			30% vs. Belt		
Type	kyds	Pen	Dam	kyds	Pen	Dam	kyds	B/D Pen	Dam	kyds	B/D-Pen	Dam
HE	0 - 1.1	0	4	1.2 - 2.8	0	3	2.9 - 4.4	0/0	3	4.5 - 5.5	0/0	2

#### PA (1) M2 .50 cal.

#### SA (1) M2 .50 cal.

Low (0.1L)

Low (0.1L)

GS6	Short Rng (75% Hit)			Med Rng (55% Hit)			Long Rng (25% Hit)			Extreme Rng (15% Hit)		
Shell	100% vs. Belt			100% vs. Belt			40% vs. Belt			30% vs. Belt		
Type	kyds	Pen	Dam	kyds	Pen	Dam	kyds	B/D Pen	Dam	kyds	B/D-Pen	Dam
Solid Slug	0 - 0.2	1	0.8	0.3 - 0.5	1	0.7	0.6 - 0.8	1/0	0.6	0.9 - 1.0	1.0	0.5

#### F&A (12) VLS w/12 AGM-114

#### F&A (12) VLS w/12 AGM-114

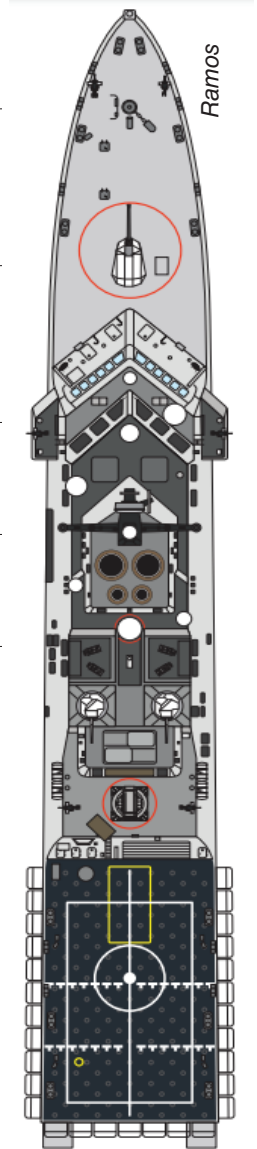
AGM-114L Longbow Hellfire. 3rd Gen I/TARH, VSmall, Direct, 772 knots (6.4 nmi per increment) Transonic Tandem HEAT warhead. Can engage 12 separate targets per Tactical Turn  
 SSM...3 -4.9 nmi, Pen 76, Damage 10

#### A (21) Mk49 w/21 RIM-116//

#### RIM-116B-1 RAM Blk IA.

Guidance: 3rd Gen PRH&IRH. VSmall. VLow-Hi. 1320 knots (11.0 nmi per increment) Low Supers  
 SAM...3 - 5 nmi, ATA 3.0  
 SSM...3 - 5 nmi, Pen: 2, Damage: 17+D6/3

#### Aft Pad (1) MH-60R



### REMARKS

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

	None	25%	50%	75%	90%	100%
Damage Points:	0	30	60	90	108	120
Maximum Speed:	40	30	20	10	0	Sinks

### 2021 Configuration

#### Fire/Flooding Severity Conditions:

Starting DP	Rc'vd DP	on turn	Remaining DP	CH Ratio	Starting DP	Rc'vd DP	on turn	Remaining DP	CH Ratio

Fire/Flooding D6%  
 Minor (01-10%)  
 Major (11-14%)  
 Severe (15-16%)  
 Overwhelmed (17%+)

Fire \_\_\_\_\_%

Flooding \_\_\_\_\_%



### BASIC SHIP DATA

Displacement: 2840 std      In Class: 9 + 5 + 2  
 Advance per 45° turn      (Speed Loss)  
 Standard rudder: 300 yards (1)  
 Hard rudder: 200 yards (2)  
 Accel/Tac Turn from 0-75% Max Speed 12  
 Accel/Tac Turn from 76-100% Max Speed 6  
 Decel/Tac Turn from from any Speed 15

Armor Rating: 0      Crew: 75  
 Size Class: C/Small      ES: 3rd Gen  
 Propulsion: CODAG/Water jet      ECM: 3rd Gen D  
 Signature: Small/Noisy      ACM: None

### SENSORS

Radar Name	Function	Lge	Med	Small	VSmall	Stealthy	Gen	Remarks
SPS-75	3D	108	77	55	22	7	6th	
	SS	36	36	32	18	10		
BridgeMaster	Nav	48	32	18	10	6	4th	

Sonar Name	Mounting	Active	Passive	Freq	Gen	Remarks
None						

Link Name	TDL Type	Surf LOS	Air LOS	Beyond LOS	Jamming Resistance
Link 16	RT	25	300	Relay	Yes 12

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)
Shell	100% vs. Belt	100% vs. Belt	40% vs. Belt	30% vs. Belt
Type	kyds Pen Dam	kyds Pen Dam	kyds B/D Pen Dam	kyds B/D-Pen Dam
HE	0 - 1 18	3.1 - 1 16	7.7 - 1/0 14	12.2 - 1/1 13
	3.0	7.6	12.1	15.1

#### P (1) Mk46 30mm//P EO GFC

GS6	Short Rng (75% Hit)	Med Rng (55% Hit)	Long Rng (25% Hit)	Extreme Rng (15% Hit)
Shell	100% vs. Belt	100% vs. Belt	40% vs. Belt	30% vs. Belt
Type	kyds Pen Dam	kyds Pen Dam	kyds B/D Pen Dam	kyds B/D-Pen Dam
HE	0 - 0 4	1.2 - 0 3	2.9 - 0/0 3	4.5 - 0/0 2
	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.	Short Rng (75% Hit)	Med Rng (55% Hit)	Long Rng (25% Hit)	Extreme Rng (15% Hit)
Shell	100% vs. Belt	100% vs. Belt	40% vs. Belt	30% vs. Belt
Type	kyds Pen Dam	kyds Pen Dam	kyds B/D Pen Dam	kyds B/D-Pen Dam
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

#### PB (4) NSM w/4 NSM

#### SQ (4) NSM w/4 NSM

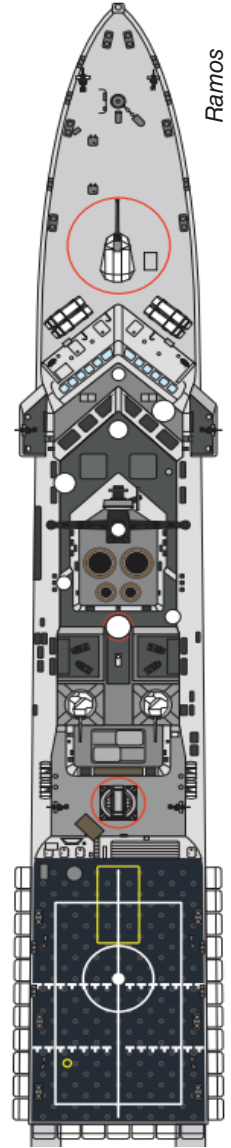
NSM. 4th Gen I&Sat/TIRH, VSmall, VLow Cruise, 627 knots (5.2 nmi per increment) Transonic  
 SSM. 1.6 - 108 nmi, Pen 15, Damage 34+D6/2, Stealthy, Terminal maneuvers, 8 Waypoints

#### 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 Supers  
 SAM. .3 - 5 nmi, ATA 3.0  
 SSM. .3 - 5 nmi, Pen: 2, Damage: 17+D6/3

#### Aft Pad (1) MQ-8B Fire Scout UAV



### REMARKS

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

	None	25%	50%	75%	90%	100%
Damage Points:	0	30	60	90	108	120
Maximum Speed:	40	30	20	10	0	Sinks

#### Fire/Flooding Severity Conditions:

Starting DP	Rc'vd DP	on turn	Remaining DP	CH Ratio	Starting DP	Rc'vd DP	on turn	Remaining DP	CH Ratio

### 2021 Configuration

Fire/Flooding D6%  
 Minor (01-10%)  
 Major (11-14%)  
 Severe (15-16%)  
 Overwhelmed (17%+)

Fire \_\_\_\_\_%

Flooding \_\_\_\_\_%

## BASIC AIRCRAFT DATA

Man Rtnng: 2.0/1.5  
 Inflight Refuel: --  
 Bombsight: --

Size/Signature: Small/Small  
 Cruise Range: 375 nmi  
 Countermeasures: 3rd Gen D

Ceiling: 4525 m  
 Engine Type: TS  
 Damage Value: 18

## 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	LMF <sup>a</sup> -MF	6th	
SSQ-62 F DICASS	Buoy	2.2	--	MF <sup>a</sup>	7th	Directional
SSQ-53G DIFAR	Buoy	--	2.5	VLF-LMF	7th	Directional

Link Name	TDL Type	Surf LOS	Air LOS	Beyond LOS	SATCOM	Jamming Resistance
Link 16	RT	25	300	Relay	Yes	12

LPI, Compatible with Link 11.

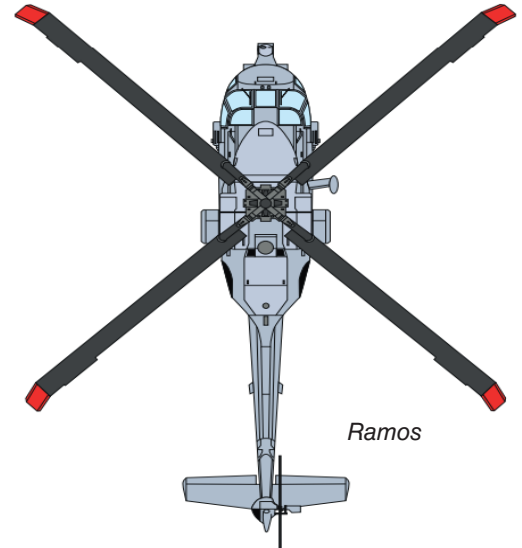
**4th Gen FLIR.** Allows ID by type/class within range, FOV is 12° for search, 3° for classification.

**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

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



## REMARKS

SQR-17 Dataink 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	FUS2	
	Fwd	Aft	
Rating (kg):	???	???	
Ordnance	Weight		
Mk46 Mod 5A(SW)	231	<input type="checkbox"/>	3rd Gen Active/Pass, 52 DP vs. sub, Max depth Deep I, Shallow Water Cap. Thermal, Contact-fuzed
Mk50 torp	363	<input type="checkbox"/>	4th Gen Active/Pass, 52 DP vs. sub, Max depth Deep V, Shallow Water Cap. Thermal, Contact-fuzed
Mk54 torp	285	<input type="checkbox"/>	4th Gen Active/Pass, 52 DP vs. sub, Max depth Deep I, Shallow Water Cap. Thermal, Contact-fuzed
AGM-114K	46	4x <input type="checkbox"/>	3rd Gen SALH, 0.3 - 4.9 nmi, 772 kts, 15 + D6/3 damage, pen 107, Top Attack, VSmall signature
AGM-114M	48	4x <input type="checkbox"/>	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	<input type="checkbox"/>	19*2.75 in FFAR
120 USG Drop tank	370	<input type="checkbox"/>	75 nmi range add

## Ordnance Loadouts:

- 1 120 USG fuel tank, 2 Mk50 torpedoes
- 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.

**BASIC AIRCRAFT DATA**

Man Rtnng: 0.0/0.0  
 Inflight Refuel: --  
 Bombsight: --

Size/Signature: VSmall/VSmall  
 Cruise Range: 540 nmi  
 Countermeasures: --

Ceiling: 6100 m  
 Engine Type: TS  
 Damage Value: 10

**SENSORS**

Radars Name	Function	Lge	Med	Small	VSmall	Stealthy	Gen	Remarks
ZPY-4	SS	70	70	40	22	12	6th	

Sonar Name	Mounting	Active	Passive	Freq	Gen	Remarks
None						

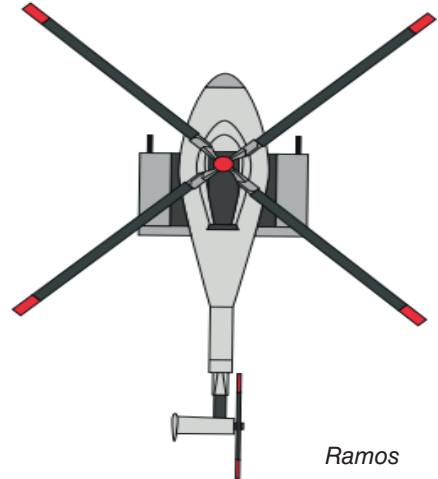
Link Name	TDL Type	Surf LOS	Air LOS	Beyond LOS	SATCOM	Jamming Resistance
None						

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

Laser Designator.

**PERFORMANCE**
**UAV, VTOL**

	Cruise	Full Mil.	Reheat
Low:	80	85	--
Med:	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.