

# SKYDRATE™

## TRAINING AND TROUBLESHOOTING

Contact support at 1 (802) 497-2253 or [help@omni-defense.com](mailto:help@omni-defense.com).



You can also view the training material at [omni-defense.com](http://omni-defense.com)

## ORDERING

SKYDRATE System and Supplies can be ordered on the GSA Advantage Website or directly from Omni Defense by calling 802-497-2253

### STARTER KITS

CSK-3 F S-X\* - SKYDRATE Female Starter Kit (Size Small)

CSK-3 F L-X\* - SKYDRATE Female Starter Kit (Size Large)

\*X = A or B A, aircraft with 1-14° angle / B, aircraft with 15-30° angle

### PADS

IFP-3-XX\*-X\*\* - SKYDRATE Female Pad

\*\*XX = Sizes 12 through 17 (see sizing chart), \*\*X = A or B (seat angles)

### BAGS

CB-12-3 - 1200mL Disposable Collection Bag

CB-10-3-RU-12 - 1200mL Reusable Collection Bag

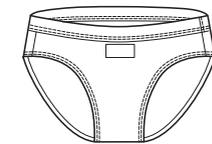
## TECHNICAL SPECIFICATIONS

Flow Rate	2.25 LPM
Operation	12 Cycles per battery charge
Capacity	1200ml (Reusable)
	1200ml, 1600ml (Disposable)
Operational Temp.	-10°C to 50°C (14°F to 122°F)
Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Rechargeable Battery	4.89 Wh Lithium Polymer (16 Hour)
Charger Power Supply	Input ~ 100-240VAC (50/60Hz), 0.3A
	Output ~ 12V DC, 500mA

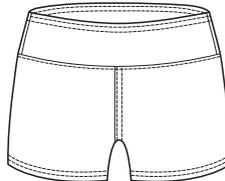
## WARRANTY

Omni warrants its system to the original purchaser, against defects in material and workmanship for a period of one year from the date of original purchase.

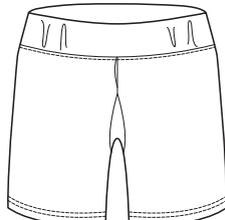
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**BIKINI**  
FG-X\*-B-MF



**CREW**  
FG-X\*-C-MF



**MID-THIGH**  
FG-X\*-S-MF

## GARMENT SIZING

There are 3 different styles of SKYDRATE garments available. These garments are Performance-Fit, Lightweight and Breathable, No-Melt / No-Drip, and machine washable.

Determine size by measuring the circumference of the hips.

SIZE	HIPS
36	36"
38	38"
40	40"
42	42"
44	44"

\*X = Hip Size (See Sizing Chart).

## PAD TYPE - SEAT ANGLE

**Pad Type A** - Seat angle from 0 - 14 degrees (F-15, A-10, etc.)

**Pad Type B** - Seat angle from 15 - 30 degrees (F-16, F-35, etc.)

## PAD SIZING

Measure from leg fold point (F), approximately 2" below bikini line, to the top of the gluteal cleft (R).

SIZE	F to R
12	12"
13	13"
14	14"
15	15"
16	16"
17	17"

\* If in-between 2 sizes, round up!  
See Sizing Chart for more information



## PAD PLACEMENT

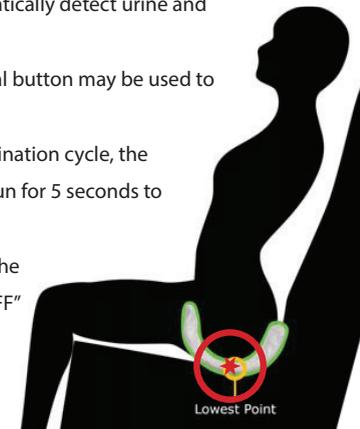
Proper pad placement and location of the sensor is **critical** for the SKYDRATE System to function properly.

- 1 The **Pickup Point**, marked by a **Gold Dot**, MUST be at the lowest point of the ejection seat
- 2 Proper pad positioning should be determined on the ground and practiced prior to flight.

## SYSTEM OPERATION

- **The Pad must be inflated before using** - Placing the In-Line ON/OFF switch to the "ON" position to begin inflation. Inflation takes approximately 60 seconds.
- The Pad Sensors automatically detect urine and activate the pump.
- Alternatively, the manual button may be used to start the pump.
- After completion of a urination cycle, the pump will continue to run for 5 seconds to drain any residual urine.
- Deflate pad by placing the In-Line Switch to the "OFF" position

\* Practice for consistency and confidence



## SYSTEM ACCESSORIES

The SKYDRATE comes with two carrying bags to store the system and extra supplies, and for transport to and from the aircraft.

AC-T-3-CT



AC-P-3-CT



# SKYDRATE™

## FEMALE SYSTEM



Scan QR code for Digital Manual



**OMNI**  
DEFENSE TECH

# SKYDRATE™

## 1 CONTROL UNIT ODT-225-F

The **Control Unit** pumps urine from the pad to the collection bag, providing non-invasive, automated bladder relief at 2.25 liters/minute. The integrated air pump inflates the pad to 6psi when connected.

- **Manual Button** - Manually activates the liquid pump while held.
- **Battery Indicator** - The 3 lights provide the battery status (12 urinations per fully-charged battery).



## 2 COLLECTION BAG CB-12-3

The **Collection Bag** is made from durable, medical-grade urethane. The bags have odor proof, liquid blocking air vents that allow air to vent and prevent it from inflating.

- **Disposable Bag** - 1200ml capacity with super absorbent polymer gel.
- **Reusable Bag** - 1200ml capacity with drainage valve

Both the reusable and disposable bags have an *emergency over-capacity* limit of an additional 500ml.

## 3 CONTROL UNIT HOSE RHS-3-F-B-12

The **Control Unit Hose** connects Control Unit and Bag to the In-Line Switch. Comes in standard (12") and extended lengths (18" and 24").

- **Nomex Fabric** - Fire-retardant cover fabric
- **Anti-Kink** - The hose contains anti-kink tubing
- **Quick Release Connectors** - The connectors will disconnect when exposed to the forces of emergency ejection.

## 4 IN-LINE SWITCH HS-225-F

The In-Line Switch allows for one handed operation of the system.

- **Manual Button** - Manually activates the liquid pump while held.
- **ON/OFF Switch** - Inflates (ON) and deflates (OFF) the pad.



## 5 PAD HOSE RHS-3-F-A-12

The **Pad Hose** connects the In-Line Switch to the pad, and should be connected to the pad prior to donning.



## 6 FEMALE PAD IFP-3-X\*-A, IFP-3-X\*-B

The Female Pad is designed to inflate. This creates a seal against the body to prevent leaks and creates space between the pad and the pelvic floor, allowing urine to flow unimpeded to the pickup point.

- **Fabric Cover** - Soft, non-woven, non-absorbent fabric
- **Urine Sensors** - Two salinity sensors detect the presence of urine and automatically activate the control unit.
- **Pickup Point** - Marked by a **Gold Dot**, the pickup point between the two sensors and should be at the lowest point in the ejection seat.

\* X = Pad Size (See Sizing Chart).

# SKYDRATE™

Safe-to-Fly, fully automated, optimized for use in ejection seat aircraft.

**Omni Defense Technologies Corp.**  
808 Hercules Drive, Colchester, VT 05446

☎: (802)497-2253 📠: (802)497-3601 🌐: www.omni-defense.com