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The gang that created the Waypoint magazine and resurrected the computer version of the Harpoon naval & aerial warfare simulator in the early 2000s, strikes again!

**Command: Modern Air / Naval Operations** is the high-fidelity warfare simulator from **WarfareSims.com**. Combining massive scale (the entire earth is your theater) and incredible depth and breadth (conflicts from 1946 to 2020+) with unprecedented detail, realism and accuracy, a powerful Windows interface and challenging AI, Command has set the new standard for air-naval war games.

Praised by military professionals, hobbyists and the gaming press alike, Command swept the *Wargame Of The Year 2013* awards and shattered sales records in its category:

**United States Naval Institute:** "Command will find a following not only among civilian gamers but might have value among military, government, and policy circles as a simulator of modern warfare. [...][This] is a game with broad appeal for everyone from casual gamers to government users looking to model unclassified, informal simulations. It likely will be the main choice for hard modern warfare simulators for years to come."

**Michael Peck, War Is Boring:** "This isn't just a game. It's a simulation that's as close as many of us will ever get to real Pentagon simulation. C:MANO, as fans call it, is a real-time game that boasts an incredibly rich—and unclassified—database of the aircraft and ships of the Cold War and beyond. [...] I strongly suspect that this game won't prove any less accurate than the government's tippity-top-secret simulations."

## Multiple awards. Over 150 scenarios (as of June 2014). Thousands of fanatical players. Tens of thousands of planes, ships, submarines, land units, satellites, weapons, sensors, and other systems.

Command: Modern / Air Naval Operations is available only at Matrix Games.

For more information go to WarfareSims.com.



# JAS-39 Gripen

# By Michael Mykytyn & Dimitris Dranidis

Users: Sweden, Czech Republic

Potential Buyers: Slovakia, Hungary, Austria, South Africa and Brazil.

#### Roles & Mission:

The Gripen is an advanced multirole combat aircraft designed as a follow-on to the successful JA-37 Viggen. Designed by SAAB Military Aircraft , Ericsson Microwave, Volvo Aero and Celsius Aerotech; this semi-stealthy fighter is charged with defending neutral Sweden's territories with advanced air to air, air to ground, anti-shipping and reconnaissance capabilities. As with previous Saab fighters, emphasis has been given to a small size and weight, serviceability by conscripts, STOL performance and overall small turnaround times to optimally serve the Swedish air force's doctrine of prolonged wartime operations from dispersal bases. It is normally expected to operate in close conjunction with airborne Erieye radar-equipped platforms for optimum A2A coverage. This aircraft is gradually replacing the aging Viggen in the skies over



Sweden. The Gripen is actively marketed by a consortium between SAAB and MBDA and has already scored an export success with the Czech air force.

**Strengths:** A powerful jack of all trades, this aircraft is designed to perform all missions expected of a combat aircraft during wartime. The Gripen is a fierce predator in the air to air role and can carry out attack missions with full self-escorting capability. Like most Swedish combat aircraft, it has a significant STOL/rough-field capability and is expected to operate from remote dispersion airfields and highway strips throughout the Swedish homeland. The built-in serviceability allows fast turn-around times, particularly for light A2A loads. The improved C version will introduce a new IRST sensor for additional "silent attack" options. This will also be retrofitted to A-models later.



#### Game Stats:

Max Speed: 900 kts Length: 14.1 Meters Span: 8 meters Weight: 4990 kg Crew: 1 Climb Rate: 255 m/s at SL

Weaknesses: The strict limits on the basic airframe's size and weight have taken their toll on the payload/radius performance of the Gripen, just as was the case with the Viggen. Range and combat radius is not too bad at altitude, but sharply deteriorates at low-level. While this is not of critical importance to the Swedish air force, export customers with an emphasis on low-level operations might find the Gripen to be a bit short-legged for their needs. A number of very interesting weapon options originally planned for the aircraft, like the ALARM anti-radiation missile, the M64 LGB and the RB-105 Taurus (KEPD) tactical cruise missile, have been cancelled, leaving the aircraft with an unimpressive diversity of stores for the strike role. The only other weakness noted with current Gripen inventories is the lack of sufficient numbers, partially a result of the high unit costs.

# WAYPOINT

# Equipment – JAS-39A Gripen (Sweden 1996) – DB2000 v6.3

Туре	Max Range	Abilities	Notes		
PS-05/A	120 nm	Surface Search, Air Intercept, Range Information, Bearing Information, Altitude Information, IFF Information	Advanced multifunction radar		

#### **IR/EO Sensors:**

Туре	Max Range	Abilities	Notes
Camera	10 nm	Surface Search, Air Intercept, Bearing Information, IFF Information, Classification	Recon Camera

#### Electronic Warfare:

Туре	Max Range	Abilities	Notes
RWR	100 nm	Surface Search, Air Search, Bearing Information	Standard RWR
DECM	N/A		Standard Defensive ECM Suite

#### Mounts:

1x BK-27 27mm gun

#### Stores:

- RB-74 Sidewinder SR-AAM
- RB-99 AMRAAM MR-AAM
- RB-15F AShM
- RB-75 Maverick ASM
- > BK-90 Mjolner Mk 1 (Frag munitions) glide dispenser
- BK-90 Mjolner Mk. 2 (AT munitions)
- 135mm Rockets
- > 1275 Liter Drop Tank

#### Versions (H3-DB2000):

- > **JAS-39A (1996):** As described.
- JAS-39A (2002): New store: RB-15 Mk3 AShM (improved RB-15). Planned acquisition of M64 LGBs (with LU-2000 LRMTS for designation) has been cancelled.
- > JAS-39C (2002): As JAS-39A (2002) with modifications. Optical camera replaced with OTIS IRST.
- JAS-39A (2004): As JAS-39A (2002) with modifications. Optical camera replaced with OTIS IRST. New store: RB-98 IRIS-T SR-AAM. This missile replaces the RB-74 in all loadouts.
- JAS-39C (2004): As JAS-39C (2002) with new store: RB-98 IRIS-T SR-AAM. This missile replaces the RB-74 in all loadouts.
- JAS-39A (2006): As JAS-39A (2004) with new store: Recon Pod.
- JAS-39C (2006): As JAS-39C (2004) with new store: Recon Pod.
- JAS-39A (2007): As JAS-39A (2006) with new store: Meteor MR-AAM. This missile replaces the RB-99 AMRAAM in most loadouts.



JAS-39C (2007): As JAS-39C (2006) with a new weapon, the Meteor MR-AAM. This missile replaces the RB-99 AMRAAM in most loadouts.

## **Current Service:**

### Swedish Airforce- Svenska Flygvapnet:

- ۶ Satenas Airbase: 2 JA-39A Divisions
- ۶
- Angelholm-Barkakra Airbase: 2 JA-39A Divisions Malmslatt Airbase: Various JA-39 (various) testing  $\triangleright$

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