



SAAB

GRIPEN NG

PERFORMANCE, FACTS AND FIGURES



CONTENTS

GRIPEN **THE SMART FIGHTER**



GRIPEN ORIGINS	3	INTEROPERABILITY	11
ONGOING DEVELOPMENT	4	LOGISTICS	12
MULTI-ROLE CAPABILITIES	5	FURTHER DEVELOPMENT AND FUTURE VERSIONS	13
INFORMATION SUPPORT	6	COST EFFICIENCY	14
RANGE AND MANOEUVRABILITY	7	TRAINING AND SUPPORT	15
WEAPONS SYSTEMS AND SURVIVABILITY	8	GRIPEN USERS AROUND THE WORLD	16
NET-CENTRIC CAPABILITIES	10	PULL-OUT POSTER	17

GRIPEN ORIGINS

During the Cold War, Sweden felt threatened by the Warsaw Pact countries. The nation needed an aircraft that could outperform and outmanoeuvre a larger force of advanced fighters.

The north of Sweden is an unforgiving land with long, freezing winters and largely unpopulated areas. It presents a harsh environment in which to operate an aircraft – yet it was this place that gave birth to Gripen.

Defending these vast areas required a fighter that could perform air-to-air, air-to-surface and reconnaissance missions in a single sortie, without the need to return to base for reconfiguration. Gripen was also designed to use roads as temporary runways, allowing the Air Force to use logistical flexibility and speed to keep an invading force at bay. Easy maintenance and reconfiguration was also vital, as it would need to be performed by Swedish conscripts with only 10 weeks' training – usually outdoors in freezing, isolated conditions.

Sweden's relatively small defence budget and the tough conditions under which Gripen was designed, led Saab to make the fighter as efficient as possible. A fundamental aspect of this approach is Gripen's modular and open avionics architecture. This enables the integration of off-the-shelf products wherever possible, as well as continuous development of new functions to meet future needs.

Gripen NG embodies Saab's *thinking edge* by bringing together performance, cost-efficiency and industrial cooperation in one smart fighter system.

CONTINUOUS DEVELOPMENT

Saab works in close cooperation with its customers around the world to help improve the aircraft. Together, we have a long tradition of continuous development. Instead of conducting major and costly mid-life upgrades, Saab uses a short upgrade cycle which provides step-wise improvements. This ensures the fighter is always modern and that upgrades can be adapted to a changing world. Improvement costs are spread out over a long period and each customer can choose to implement upgrades at a time that best suits them.

FACTS

- ▶ **TURNAROUND TIME:**
10 minutes with
air-to-air configuration
- ▶ **MINIMAL TAKE-OFF/
LANDING DISTANCE:**
500/600 m
- ▶ **MAXIMUM SPEED:**
Mach 2 at high altitude
- ▶ **TIME IN THE AIR WITH
A TYPICAL AIR-TO-AIR
CONFIGURATION:**
2 hours
- ▶ **DIMENSIONS:**
Length 15.2 m,
wingspan 8.6 m
- ▶ Small visual, radar
and IR signature

ONGOING DEVELOPMENT

In service for over 15 years, Gripen is the pinnacle of more than 75 years of Saab's aircraft design and development experience. The latest NG version is an evolution of the aircraft, building on its strengths and adding further capabilities.

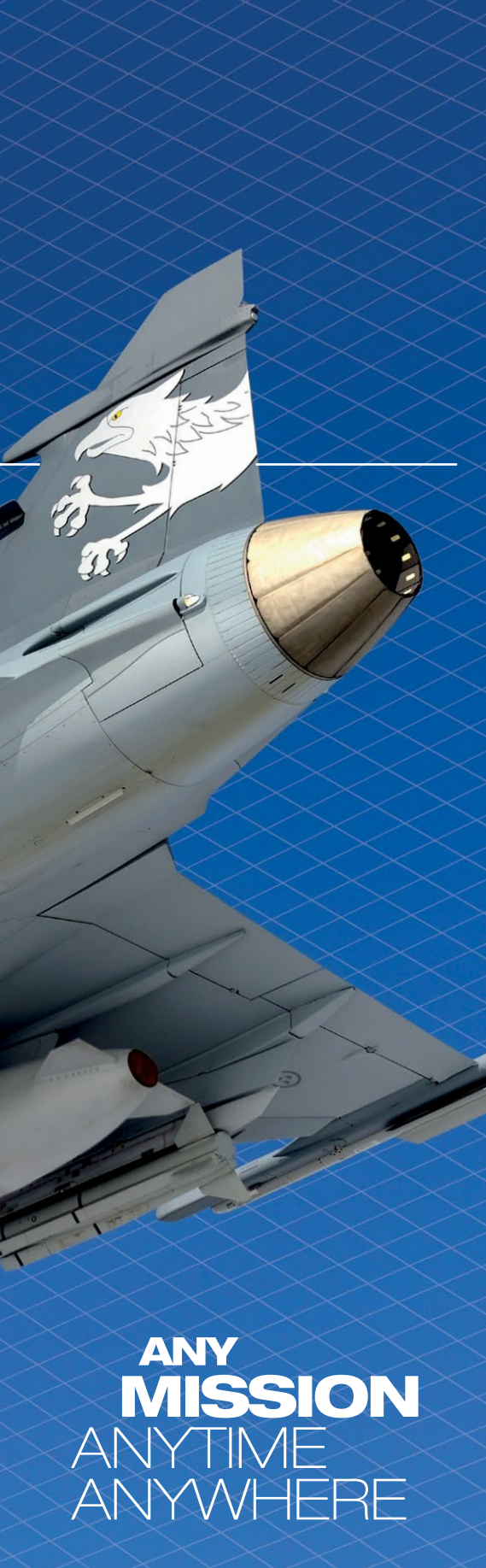
Gripen NG offers a range of options, enabling users to select a bespoke aircraft rather than a set system. Gripen E for example, is the single-seat airframe configuration that has been selected by Sweden.

The C/D versions of Gripen are the current generation of fighter. In service around the world, they are consistently being upgraded and are therefore always ready for modern missions.



SPECIFICATIONS

LENGTH	15.2 m	MAX. SPEED AT SEA LEVEL	> 1,400 km/h
WIDTH	8.6 m	MAX. SPEED AT HIGH ALTITUDE	Mach 2
MASS WHEN EMPTY	8,000 kg	SUPERCruise CAPABILITY	Yes
INTERNAL FUEL CAPACITY	3,400 kg	MAX. SERVICE ALTITUDE	> 16,000 m
MAX. TAKE-OFF WEIGHT	16,500 kg	FERRY RANGE	4,000 km
MAX. THRUST	98 kN	G-LIMITS	+9G/-3G
MIN. TAKE-OFF DISTANCE	500 m	HARDPOINTS	10
LANDING DISTANCE	600 m	COMBAT TURNAROUND AIR-TO-AIR	10 min
		FULL ENGINE REPLACEMENT	<1 hour



MULTI-ROLE CAPABILITIES

Gripen is among the first aircraft to focus on more than air-to-air combat. This means that it can cover a full range of mission requirements, saving customers the cost of owning separate bombers and fighters.

From the very beginning, Gripen has been designed to be a true multi-role and swing-role fighter – meaning it can perform air-to-air, air-to-surface and reconnaissance missions. Gripen can seamlessly change between roles within a single sortie if needed. Gripen NG can perform a wide range of missions, from offensive and defensive

counter strikes to air policing and tactical air reconnaissance. These missions can be performed 24/7 in all types of weather.

This multi-role capability will evolve as the fighter's AESA radar and other systems are further developed.

A multi-role fighter for air-to-air, air-to-surface and reconnaissance missions:



AIR-TO-AIR

Intercept enemy fighters, bombers or reconnaissance threats

RECONNAISSANCE

Identify threats and patrol your borders

AIR-TO-SURFACE

Destroy vehicles, ships, buildings and enemy weapons installations

INFORMATION SUPPORT

Knowledge is everything in combat and knowing more than the enemy is vital to mission success.

To achieve information superiority, fighter pilots need to be able to identify enemy assets and share intelligence with wingmen, as well as be able to have it presented to them in a clear way. At the same time they need to stop the enemy from acquiring the same type of information.

Gripen NG's sensor suite identifies the enemy using a number of active and passive methods while retaining a relatively small radar and infrared signature. The onboard Electronic Warfare (EW) systems can also jam enemy sensors and approaching missiles, while the aircraft's relatively small size makes it difficult to detect visually.

MFS-EW

Electronic Warfare system – a complete, highly integrated suite that includes radar warning receiver, missile approach warning, electronic support measures and countermeasures

RECCE POD

Equips the fighter with a full range of reconnaissance capabilities