



GRIPEN AGGRESSOR FOR THE US 

Train like you **fight**

ARTIST IMPRESSION



SAAB

A new generation of air combat training

In order to train like you fight, a completely new level of aggressor capability is required in order to replicate modern adversary threat aircraft systems in a representative way. A new generation of highly maneuverable and sophisticated threat fighters are now operational with continuously improved capabilities. Gripen Aggressor is designed with the purpose to provide relevant peer-to-peer air combat training in order to prepare fighter pilots for future conflicts.

TRAINING EFFECT

Gripen Aggressor is the perfect combination of a very agile platform, state of the art sensor performance and highest level of system of systems integration. With the intuitive human machine interface and decision support, all Gripen Aggressor pilots in a tactical unit share a common situation awareness picture. The flexible and scalable Gripen Aggressor system will bring worthy red air opponents to the fight and provide optimized fighter pilot training.

FLEXIBILITY

A high end aggressor system must be able to provide dissimilar training by replicating all the essential characteristics of a red adversary threat while still being deliberately different from the blue forces. The fully NATO compatible Gripen Aggressor can replicate a wide range of threat characteristics up to peer to peer system performance to any blue force fighter system.

GROWTH POTENTIAL

A high end aggressor system must be able to meet evolving operational capability requirements in order to provide relevant training effect. The Gripen inherent system flexibility and adaptability and continuous development concept ensures operational relevance over time. The Gripen Aggressor will benefit from the Gripen C/D fighter roadmap, which guarantees operational relevance for several decades to come in the most stringent of air combat scenarios. Future upgrades can be tailored to individual customer requirements.

AVAILABILITY

Gripen Aggressor, based on the Gripen C/D version in service in a number of air forces worldwide, has an unmatched track record of system reliability and availability. Built in test, functional monitoring, fault isolation together with short turnaround times and a low logistic footprint ensures high sortie rate and rapid deployment at an affordable cost.

Gripen Aggressor

Key features

PERFORMANCE

Supersonic at all altitudes
High instantaneous & sustained turn rate
Care-free manoeuvring

SITUATIONAL AWARENESS

Long-range multi-mode radar (PS-05 Mk IV)
Gripen Fighter Link, Link 16, FAC-link
HMD

SURVIVABILITY

Low Observability (RCS, IR and Visual)
Integrated EW suite
ECM & CMDS

DISSIMILAR

Dissimilar flight characteristics
Dissimilar fighting tactics
Fully NATO Interoperable

TACTICAL RECORDING

Sensor data
Weapons engagements
EW analysis

FLIGHT SAFETY

Automatic Ground Collision Avoidance System (GCAS)

SIMULATED A/A WEAPONS

BVR
HOB-missiles/HMD
ACMI Pod

GROWTH POTENTIAL

Prepared for future requirements
Flexible and adaptable
Fast and easy upgrades

ENDURANCE

Long play-time for air combat missions
Air-to-Air refueling
3 wet stations for external droptanks



AGILITY

Gripen Aggressor combines low radar, IR and visual signatures with a highly maneuverable and agile platform, which is totally care-free from a pilot's perspective, both with respect to flight control system and engine handling. This gives the pilot the possibility to use the full performance, depending on desired threat replication, with a minimum of pilot workload. The Manoeuvre Load Limitation (MLL) system integrated in the flight control system, automatically and dynamically limits loadfactor, angle of attack and roll rate depending on aircraft weight, amount of fuel and external stores configuration without the need for pilot monitoring. The default automatic MLL can also be manually set by the pilot in order to replicate the agility of the desired threat platform.

RADAR

The Gripen Aggressor radar can match any fighter platform in Air-to-Air performance with long range detection and tracking at all altitudes, and with the capability to detect very low RCS targets. The radar can work in numerous modes, waveforms and frequencies in order to realistically represent the desired threat emitter. In a BVR scenario, the multi-target and multi-engagement radar can be used in different modes like *Long Range Search* or *Low Probability of Intercept* in order to maximize range performance or stay undetected as long as possible. The radar can support several simultaneous simulated BVR missiles and is extremely resistant to ECM techniques with advanced automatic ECCM modes.

ELECTRONIC WARFARE SYSTEM

The Gripen Aggressor integrated Electronic Warfare System provides extremely accurate RWR detection and identification together with the latest jamming techniques and significant amount of passive countermeasures in terms of chaff and flares. The EW System has the capability to detect, classify, identify and activate countermeasures against numerous threats simultaneously, using the latest DRFM jamming techniques and advanced cocktails of passive countermeasures. The system can be operated in different modes from Manual to fully Automatic control, depending on threat replication.

WEAPON SYSTEM

Gripen Aggressor has scalable generic missile models for BVR and WVR HOBS-missiles. Own and blue forces Weapon Engagement Zones (WEZ) can be preplanned in the Mission Support System, downloaded to the aircraft and selectable for the pilot during flight in order to replicate the desired threat weapon system. Multiple BVR missiles can be supported simultaneously, and in a WVR engagement HOBS-missiles can be simulated or real using a CATM attached to the wingtip pylons and cued with a Helmet Mounted Display system. Based on customer data, any advanced weapon model can be included and simulated with high accuracy and degrees of freedom. Post flight, all weapon engagements can be replayed and evaluated using the Gripen Aggressor Mission Support System.

SITUATIONAL AWARENESS

In a modern air combat scenario, information advantage is the key to mission effectiveness and survivability. With the high level of system integration, Gripen Aggressor offer full flexibility in selection of the amount of information that provides situational awareness to the Aggressor pilot. Depending on the desired threat replication, the system can be set in different modes from limited own sensor information up to full sensor fused network capability with a shared and common SA picture between participating Aggressor units and/or Command and Control.

TACTICAL RECORDING

The training effect and success of adversary air missions depends on the planning of the mission and the analysis and feedback from previous missions. The Mission Support System (MSS) is a multi-functional, ground based system with full support for mission planning, rehearsal, evaluation, analysis and training, for every operational mission performed by Gripen Aggressor. With the integrated and extensive tactical recording functionality, data from all participating Gripen Aggressors can be synchronized for detailed post flight de-briefing and evaluation.

FACT AND FIGURES

Length.....	49 ft
Width	27.5 ft
Max take off weight	31.000 lbs
Empty weight	16 500 lbs
Thrust.....	18.500 lbs
Internal fuel	5.300 lbs
External fuel	3 x 300 gal DT
Turnaround time.....	< 10 min
MTBF	7.5 h
MTTR.....	2.5 h
Engine replacement	< 1 hour

PERFORMANCE

Max speed at sea level.....	Mach 1.2
Max speed at high altitude	Mach 2
Max service altitude.....	> 50.000 ft
Maximum load factor	+9 g / -3 g
1-9 G onset rate.....	< 1 sec
Roll rate	> 300°/s
Combat radius	> 500 M
Ferry range.....	1900 M

STOL CAPABILITY

Take off distance.....	2.000 ft
Landing distance	1.650 ft
Required runway length.....	4.000 ft

Gripen Aggressor Cockpit

The fully night vision compatible Gripen Aggressor cockpit with wide Field of View holographic Head Up Display, 6 x 8" colour Multi-functional Displays, integrated standby instruments and complete system HOTAS control.



Contact information

Saab North America

5717 Enterprise Pkwy,
East Syracuse
NY 13057, USA

info@saabusa.com
+1 (315) 445-5009

