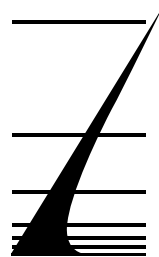


The Market for Strike Missiles

Product Code #F660

A Special Focused Market Segment Analysis by:



FORECAST INTERNATIONAL

Analysis 5

The Market for Strike Missiles

2011- 2020

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PROGRAMS

The following reports are included in this section: (**Note:** a single report may cover several programs.)

AASM

Advanced Technology Cruise Missile

AGM-65 Maverick

AGM-84E SLAM

AGM-86A/B

AGM-88A/B/C HARM

AGM-142A HAVE NAP

ALARM

ARMAT

ARMIGER

ASMP/ASLP

BrahMos

Hsiung Feng I/II

International Anti-Radiation Missiles

JASSM

Modular Stand-Off Weapon

NSFS

Russian Strike Missiles

SCALP

Tactical Tomahawk

TAURUS

Type 80 (ASM-1/ASM-2)/Type 88 SSM-1

Introduction

So-called strike or interdiction weapons have been around for at least 100 years (possibly longer depending on the systems included). The first missile-type systems were operationally deployed by the Germans during the Second World War.

Nazi Germany pushed ahead the most vigorously with the development of missile systems. Motivated by the mounting pressure from the Allies' clear numerical superiority, Germany believed it could offset this imbalance through the use of technology.



Fritz X

Source: USAF

The first strike weapons to resemble those of this century, called the Fritz X and the Hs-293, were developed by Germany. Although virtually unknown today, these two guided strike weapons were the first used in combat.

Fritz X – Technical Data

Length	3.26 m
Wingspan	1.35 m
Diameter	0.56 m
Total Weight	1,570 kg
Warhead Weight	270 kg
Maximum Speed	1,035 kph
Maximum Range	5 km
Guidance	Radio

Henschel's Hs-293 and Ruhrstahl's Fritz X (also called FX1400X, SD1400X, and PC1400X) were both air launched from motherships and radio controlled. The primary targets for these weapons were maritime vessels, but both were used against land-based targets.

The first operational use of the Fritz X occurred on August 29, 1943. Three Fritz Xs were used to sink the Italian battleship *Roma* off Sardinia on September 9, 1943, to prevent its surrender to the Allies.

Total production of the Fritz X is in dispute. Some sources quote a figure of 1,386, while others cite totals of 1,400 and 2,000. Production began in April 1943 and continued through December 1944. Some 700-800 missiles were available for combat operations (the remaining inventory was used in testing and training), but only 200 may have actually been fired in hostilities.

The missile's poor accuracy produced a success rate of only 20 percent.

The Hs-293 was developed at the same time as the Fritz X. The initial version was the Hs-293V-1, which was a glide bomb (this model never left the drawing board). The first Luftwaffe unit to receive this missile was the KG 100. A Do 217E-5 from the II/KG 100 Luftwaffe division used an Hs-293A-1 to sink the British corvette HMS *Egret* in the Bay of Biscay on August 27, 1943. This was the missile's first combat success.

Hs-293 – Technical Data

Length	381.9 cm
Wingspan	310 cm
Diameter	47 cm
Total Weight	1,045 kg
Warhead	500 kg
Max Speed	260 m/sec
Max. Range	8.5 km
Guidance	Radio
Propulsion	Liquid-Fuel Rocket Motor

By early 1944, Allied countermeasures had so reduced the effectiveness of these anti-ship missile attacks that all operations ceased after March of that year.

Although originally designed to attack ships, the Hs-293 also was used against land-based targets. In the post-war years, captured examples of the Hs-293 were studied by both the Western and Eastern alliances. An early Soviet missile was based on the Hs-293 concept.

Little was heard from strike missiles for the next 20 years until the U.S. became involved in the conflict in Southeast Asia.

Precision Strike and Vietnam. Soon after the end of the Second World War, the United States and its allies began to prepare themselves for a possible military confrontation with the Soviet Union. The Western alliance did not believe any future war would be like those of the past due to the development of nuclear weapons. Many "experts" believed any future East-West conflict would quickly lead to a nuclear exchange that would end the fighting. Massive armies maneuvering on the battlefield or hundreds of aircraft fighting for aerial supremacy were things of the past. The thinking was, who needs precision when a nuke can obliterate a target even it misses by a few miles?

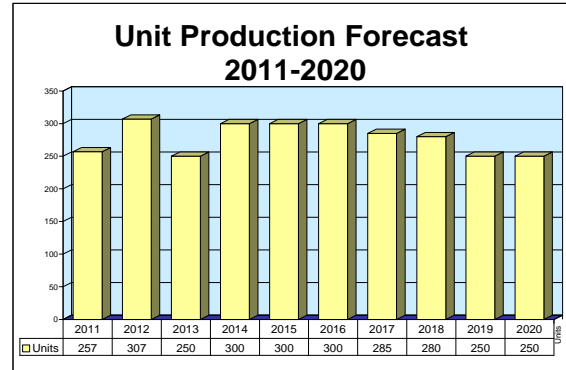
The Korean War changed this mindset, somewhat. Within the Korean Peninsula, the United States did not restrict its air campaign. Anything moving in enemy

Continued...

AASM

Outlook

- In production
- France purchase IIR and Laser versions of the Armement Air-Sol Modulaire (AASM)
- AASM saw combat with French forces in Afghanistan during April 2008
- Morocco will arm its fighter aircraft with the AASM
- MBDA has ceased manufacturing the AS.30L



Orientation

Description. Tactical air-to-surface missile.

Sponsor. French Ministry of Defense, through the French Air Force.

Status. Sagem was awarded a contract in 2000 for the manufacture of the Armement Air-Sol Modulaire (AASM) upgrade kits. Deliveries of the first batch of AASMs were to begin in mid-2005.

Production of the AS.30L is believed to have ended. Production of the original AS.30 began in the 1963/64 timeframe and ran through 1970. Fabrication of the AS.30 Laser began in early 1984, with first deliveries made in September 1984 to the French Air Force.

Total Produced. Some 1,498 AASM kits were produced through the end of 2010.

Approximately 4,064 AS.30, 33 AS.30 IIR, and 1,233 AS.30 Laser missiles (including 100 Laser RDT&E units) were built. Approximately 57 AS.30Ls were fired during the Persian Gulf War. The missile was also used against Serbian military targets in Bosnia-Herzegovina and later in Kosovo. The 600th missile was delivered in 1991.

Application. Air-to-surface missile for interdiction by manned aircraft.

Price Range. The unit cost for the AS.30 Laser has been placed at \$619,570 in FY01 dollars. The AASM kits are expected to cost between \$135,000 and \$140,000 each.

Contractors

Prime

Sagem	http://www.sagem-ds.com , Le Ponant de Paris, 27, Rue Leblanc, Paris, 75015 France, Tel: + 33 1 58 11 78 00, Fax: + 33 1 58 11 78 50, Prime
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AASM

Subcontractor

Luchaire Défense SA, Giat Industries - La Chapelle Saint-Ursin	http://www.giat-industries.fr , Route de Villeneuve, BP 13, La Chapelle St-Ursin, 18570 France, Tel: + 33 02 4868 7171, Fax: + 33 02 4868 7054 (Priming & Safety Fuze)
Roxel France	http://www.roxelgroup.com , Ave Gay Lussac, Saint-Médard-en-Jalles, 33167 France, Tel: + 33 556 70 50 50, Fax: + 33 556 70 75 22 (Rocket Motor)
NOTE(S): Sagem is the prime contractor for the AASM kits. On May 14, 2008, Sagem and MBDA signed a cooperation agreement concerning the AASM. MBDA will assist in securing orders for the AASM.	

Comprehensive information on Contractors can be found in Forecast International's "International Contractors" series. For a detailed description, go to www.forecastinternational.com (see Products & Samples/Governments & Industries) or call + 1 (203) 426-0800.

Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; rich.pettibone@forecast1.com

Technical Data

	<u>Metric</u> AS.30L	<u>Metric</u> AASM	<u>U.S.</u> AS.30L	<u>U.S.</u> AASM
Dimensions				
Missile length	365 cm	3.10 m	11.97 ft	10.17 ft
Missile diameter	34.2 cm	Not Available	1.12 ft	Not Available
Missile weight	520 kg	340 kg	1,144 lb	749.7 lb
Finspan	100 cm	Not Available	3.28 ft	Not Available
Performance				
Speed	Mach 1.5	Mach 0.9	Mach 1.5	Mach 0.9
Altitude	50-10,000 m	Not Available	164-32,800 ft	Not Available
Range (min)	3 km	15 km	1.62 nm	9.315 mi
Range (max)	11+ km	50 km	6.83+ mi	31.05 mi
CEP	<10 m	1 m	<33 ft	3.28 ft

Propulsion. The AASM uses a solid-rocket motor. Roxel provides the propellant.

Control & Guidance. The AASM uses a hybrid global positioning system (GPS) and inertial-navigation system (INS). This weapon can be outfitted with an infrared sensor.

Launcher Mode. Air launched from wing-mounted pylons or centerline fuselage stations. The AASM is compatible with various types of single- and multiseat military aircraft such as the Mirage 2000 and Rafale.

Warhead. High-explosive warhead weighing 250 kilograms. The AASM kit is used with the Mk 82 and BLU-111 bombs.

Variants/Upgrades

There are currently two versions of the AASM: decametric all-weather version using hybrid INS/GPS guidance with the accuracy of 10 meters; and a metric day/night version using hybrid INS/GPS guidance, together with an infrared imaging system with an accuracy of 1 meter.

This has the potential for a large family of weapons. Three new possible versions include a laser-guided version, an all-weather version with an electromagnetic homing head, and a version integrated with a 1,000-

kilogram bomb. Other possible versions include an anti-radar version, a datalink version, a multiple warhead version, and a high-penetration version. MBDA is also studying a version to attack air defense radars.

Besides the original AS.30 missile system, Aerospatiale has developed the AS.30 Laser and the AS.30 Imaging Infrared (IIR) versions. For additional information, please see the pertinent entries in the **Program Review** section.

Program Review

Background. The Armement Air-Sol Modulaire (AASM) program began in 1997 in response to calls to improve the strike capability of French combat aircraft. France had been examining ways to upgrade the accuracy and range of its current air-to-surface missile inventory. The AASM is a joint French Air Force and Navy effort. This weapon is for use against targets that do not require high-value missiles such as the APACHE.

The project incorporates growth potential for terminal guidance with millimeter-wave or imaging-infrared seekers, an improved warhead, and fuzing. The propulsion system is relatively simple – a low-cost rocket motor that performs at ranges from 15 to 65 kilometers. Some 500 to 5,000 kits could be acquired by the French Air Force and Navy, although initial buys could amount to only 3,000 kits. Some sources say that the AASM will replace all direct-attack weapons in French inventories, including the AS.30 missile system. However, others say that it will merely supplement this inventory by providing a more accurate system than a general-purpose bomb, which is less expensive than high-end weapons, such as the APACHE.

A Request for Proposals for the AASM was issued in 1998. In September 2000, Sagem was selected by the French Ministry of Defense to develop and produce 3,000 AASM guidance kits. A contract worth EUR425 million was awarded to Sagem in 2000. This contract calls for the delivery of 750 kits, with another 2,250 on option (some 1,100 kits were scheduled for delivery by 2008). The AASM kits are now known as KARIN. The anticipated unit price of these kits is \$135,000.

France Expanding Air-Launched Strike Capability

The initial version delivered to the French military in 2004 was the INS/GPS kit. The improved INS/GPS/IIR kits followed in 2006. A version equipped with a millimeter-wave seeker could have entered development around 2008.

Sagem is hoping that the initial French contract will lead to additional orders from foreign clients.

MBDA and Sagem signed a cooperation agreement on May 14, 2008, concerning the AASM and infrared guidance for tactical missiles. Under the terms of the agreement, MBDA France will be responsible for all sales and marketing of the AASM family developed by Sagem. The two companies will also combine their respective areas of expertise to form a close partnership

for the joint development of future versions of the AASM family.

Missile Models. The AS.30 is available in two models, with a third, supposedly infrared-guided version, having been considered for development.

AS.30. The AS.30 was basically a larger version of the former Nord-Aviation AS.20 air-to-surface missile, now out of production. Aerospatiale's AS.30 was initially designed to be a short- to medium-range air-to-surface missile, with a limited stand-off capability and a precise circle of equal probability (less than 10.66 m, or 35 ft). As an option to the original manual guidance system, the AS.30 was equipped with a pilot-guided infrared tracker to guide the missile to the target.

Obviously, this did not produce a true fire-and-forget capability. The pilot was forced to track the target optically until missile impact. While the AS.30 had outstanding accuracy, it unduly exposed the pilot and the aerial platform to a high risk of destruction. This became more pronounced in the sophisticated air defense environment of the 1980s. We believe this was a prime consideration in developing the AS.30 Laser variant, and halting production of the basic AS.30 in 1977.

This radio-controlled missile was purchased by France, Germany, South Africa, and the United Kingdom.

AS.30 Laser. This joint-development project between Aerospatiale and Thomson-CSF (Thales) was undertaken in the mid-1970s. Prototype flight testing was initiated in 1976 and continued through 1977. Extensive operational flight evaluations were made, and production commenced in early 1984. An Initial Operational Capability with 30 French Jaguar aircraft was achieved in September 1984.

The AS.30 Laser is equipped with the ARIEL laser-guidance unit, which has been integrated with the airborne laser-guided attack system ATLAS, jointly developed by Thomson-CSF and Martin Marietta. The missile retains the same basic physical configuration as the basic AS.30, but it has the capability for semi-active laser terminal guidance. It has been reported that missile accuracy is dead on target when targets have been properly laser-designated. The missile weighs some 520 kilograms, 245 of which constitute the warhead. It can penetrate 198.12 centimeters of armor at a maximum stand-off range of 11 kilometers.

The most recent success with the AS.30 Laser was the impact of two missiles on an old 2,700-tonne supply ship, *Aunis*. The firing was made at high speed and low

AASM

altitude by a Jaguar. The first missile struck the vessel just where the laser illuminated. The second missile struck the target 1.5 meters above the position of the first.

AS.30 Imaging Infrared. Even though the laser-guided variant of the AS.30 has only recently entered service, it is known that Aerospatiale is already working on an imaging infrared seeker for the basic AS.30 Laser missile. Of course, the infrared seeker will replace the current laser seeker. No information is available concerning a production startup date for the AS.30 IIR.

AASM. The AASM can work with 125-, 250-, and 1,000-kilogram general purpose bombs, providing a precision attack and extended range capability. The AASM is similar to the U.S. Global Positioning System-Aided Munitions (GAM). There are three versions: inertial guidance/GPS; inertial guidance/GPS

with an imaging infrared (IIR) for terminal guidance; and inertial guidance/GPS with laser guidance.

France completed the third and last qualification firing test of the infrared terminal guidance version of the AASM at its missile test range in Biscarosse on July 9, 2008.

The French Air Force tested the IIR version of the Armement Air-Sol Modulaire (AASM) on October 27, 2009. A Rafale from the Centre des Experiences Aeriennes Militaires at Mont-de-Marsanto fired this weapon into the Biscarosse range. Deliveries of AASM-IIRs to the French Air Force commenced in the first half of 2010.

Sagem is also working on a laser-guided version of the AASM (AASM Laser) for use against moving targets. This latest version of AASM will be available from 2012.

Related News

France Seeks Consolidation of Missile Industrial Sector – French Defense Minister Herve Morin is urging three companies to consolidate their missile-producing activities as a means to retain France's control over this slice of the defense industrial sector. Retention of sovereignty in select industrial areas is a cornerstone of French defense industrial policy, despite the country's urging of fellow European Union members to streamline industry and create large, single-house specialists such as EADS through which European defense would have more standardization. Morin has asked the DGA (Direction Générale de l'Armement) to undertake a study that would seek to drive consolidation of three companies in the missile sector: MBDA, Thales and Safran.

MBDA is a European company jointly owned by BAE Systems, EADS and Finmeccanica that builds a broad range of guided missiles for use at sea, on land and in the air. Thales and Safran each have a more narrow focus in the missile field, with the former focusing on very short-range and air defense missiles and the latter on the AASM propelled guided smart bomb. (*Defense News*, 9/10)

Morocco Upgrading Armed Forces' Weaponry – The Moroccan government is proceeding with its military modernization program. Morocco's Mirage F1s are receiving an upgrade that improves its air-to-air and air-to-surface capabilities. These aircraft will be able to carry AIM-9L/M Sidewinder, Magic 2 or MICA-IR short-range air-to-air missiles. In addition, the Mirage F1s will be able to fire MICA-EM medium-range air-to-air missiles.

The new air-to-surface armaments these aircraft will fire include the AASM precision-guided, stand-off weapon. Other strike weapons include the ARMAT anti-radiation and AM39 Exocet anti-ship missiles. France sees further upgrade opportunities for the Mirage F1s in Gabon, Libya and perhaps, Ecuador. France could sell surplus Mirage F1s to Argentina. (*Arabian Aerospace*, 4/10)

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Funding

The French Defense Ministry unveiled its new budget for 2009 in late September 2008, claiming a 5.4 percent increase in defense spending over the 2008 budget. The Defense Ministry highlighted a spike in year-to-year equipment spending of EUR1.6 billion, bringing the total allocation for defense material to EUR17 billion this year.

AASM

There will be significant equipment orders in 2009. These include 150 naval cruise missiles from MBDA, three new FREMM multimission frigates, 1,000 AASMs, and 16,454 FELIN systems. By late 2007, France had ordered 744-750 AASMs. France will order at least 3,000 AASMs: 2,000 for the Air Force and 1,000 for the Navy.

France has ceased procurement of the AS.30 missile.

French Defense Budget Figures

	FY09	FY09	FY10	FY10	FY11	FY11	FY12	FY12
	<u>QTY</u>	<u>AMT</u>	<u>QTY</u>	<u>AMT</u>	<u>QTY</u>	<u>AMT</u>	<u>QTY</u>	<u>AMT</u>
U.S. dollars	-	71.48	-	72.10	-	59.49	-	59.79
Euros	-	48.25	-	48.67	-	46.85	-	47.10

All values are in billions.

Contracts/Order & Options

In late Dec 2009, the Directorate General of Armaments (DGA) ordered another 680 Armement Air-Sol Modulaire (AASM) kits. Sagem manufactures this bomb conversion kit. According to the French Ministry of Defense, this order brings the total number of AASMs under contract for the French Air Force and Navy to 1,424 kits. The new order involves the purchase of 300 inertial/GPS kits and 380 of the laser-guided version. In the long term, DGA could order 3,400 AASM kits, according to Sagem. The initial contract with Sagem was for 750 kits for the French Air Force.

In 2007, Morocco placed an order for an undisclosed number of AASMs. The value of this contract is not available.

In Sep 2000, Sagem was awarded a EUR425 million contract for the development and production of 3,000 AASM guidance kits: 2,000 for the Air Force and 1,000 for the Navy. This contract procures equal numbers of GPS and Infrared versions. These kits are for 250-kilogram bombs. The schedule called for deliveries to commence in 2004 under this contract. The initial batch is for 750 units.

Timetable

<u>Year</u> AS.30	<u>Year</u> AS.30 Laser	<u>Year</u> AASM	<u>Major Development</u>
1958			Development commenced
1959-60			Original AS.30 version in production
1964			Semi-Active Command Line-of-Sight AS.30 available
	1973		RDT&E
	1974-75		Engineering development commenced
1970			Production halted
	1977-78		Prototype evaluations
	1979-81		Flight evaluations
	1983		Initial low-rate production
	Sep 1984		Initial deliveries to French Air Force
	Late 1984		Full-scale production
	1988		AS.30 IIR unveiled
	1989-95		Production of AS.30 Laser continues
	1995		French Navy places first order
	2000-2001		AS.30L production completed
		2005	AASM deliveries begin
		2006	Operational deployment by France delayed
		2007	AASM operational with French Air Force
		2008	AASM used in combat in Afghanistan by French Air Force
		2009	IIR version of AASM tested
		2010	France tests laser-guided AASM

AASM

Worldwide Distribution/Inventories

Over the years, the AS.30 family has been exported to countries in Europe, Latin America, the Middle East, and Asia.

MBDA is awaiting the first AASM export order. France may offer the AASM to **Brazil** as part of a larger deal to provide fighter aircraft.

Finland wants a new air-to-surface weapon to equip its F/A-18 Hornet fighters. The United States could be the source of these missiles. A deal could be reached by 2012. A possible candidate for meeting this need is the Lockheed Martin Joint Air-to-Surface Stand-off Missile (JASSM). However, Finnish news reports claim purchasing a European missile is also an option, such as the MBDA SCALP-EG and Sagem's AASM. This contract could be worth hundreds of millions of euros.

Sagem could offer the AASM for use on MiG fighters.

India may finally move ahead with the upgrade of its fleet of Mirage 2000 fighters. This idea has been floating around for years, but a contract award was repeatedly delayed. The Indian government is ready to ask for upgrade proposals. India has 51 Mirage 2000s. Thales could team with Hindustan Aeronautics Ltd (HAL) to jointly bid for the project.

As part of this upgrade, India will receive new air-to-air missiles. The source of these missiles will be MBDA. The company will supply its MICA missile. Also, MBDA will provide new air-to-ground weaponry, possibly the AASM.

France wants to export surplus Mirage F1 fighters. The export proposal comes with an upgrade package for these aircraft. Sagem and Thales will do the upgrade work. A similar upgrade package was provided to **Morocco** for its Mirage F1s. Besides installing the RDY3 radar, the upgraded Mirage F1s will be capable of carrying MBDA MICA air-to-air missiles and Sagem's AASM. In 2007, Morocco became the first export customer for the AASM.

Libya is regaining access to Western defense equipment. France may soon sign a deal with Libya for the export of aircraft and air-launched weaponry. Libya's fleet of Mirage F1s could receive an upgrade package similar to that installed on Moroccan aircraft. France is offering Libya Rafale fighters and associated armaments.

In 2005, **Morocco** said it would upgrade its 27 Mirage F1s instead of procuring new aircraft. This upgrade contract is worth EUR350 million. The upgrade contract includes EUR100 million for new armaments. Among the armaments France is proving to Morocco is the AASM. This contract came in 2007.

Saudi Arabia announced plans to acquire the SCALP cruise missile from MBDA in early 2010. There are unconfirmed reports this package includes the AASM. These weapons will arm Saudi Tornado and Typhoon fighters. Another Gulf State considering a purchase of the AASM is the **United Arab Emirates** (UAE).

User Countries. The following countries have purchased a member of the AS.30 family: **France** (AS.30, AS.30 Laser for the Air Force and Navy), **Egypt** (unconfirmed AS.30 Laser purchase), the **Federal Republic of Germany** (AS.30), **India** (AS.30), **Iraq** (AS.30 Laser: first known export customer), **Jordan** (AS.30 Laser), **Peru** (AS.30), **South Africa** (AS.30), **Switzerland** (AS.30), and the **United Kingdom** (AS.30).

Operators of the AASM are **France** and **Morocco**.

Forecast Rationale

Sagem has major hopes for the Armement Air-Sol Modulaire (AASM). The AASM is a low-cost weapon similar in concept to the Boeing Joint Direct Attack Munition (JDAM) developed by the United States that turns a general-purpose bomb into a precision guided munition (PGM). In addition, the AASM bridges the gap between weapons such as the BGL laser guided bomb and the AS.30L, and long-range missiles such as the SCALP-EG.

Looking for New Export Orders

Production of the AASM is proceeding to meet domestic and foreign orders. Deliveries to the French Air Force are under way and could eventually reach 5,000 AASM units. The initial procurement goal is in the area of 3,400 kits. Deliveries of these units will occur over a longer period than once anticipated. This

AASM

will stretch out procurement, and reduce annual production levels.

Meanwhile, Sagem is pursuing potential export orders. The company is looking to mimic the sales success of similar systems marketed by U.S. defense firms. Sagem sees a potential foreign market for up to 10,000 AASM units. The company is also hoping the commercial success of the Rafale fighter aircraft will help boost demand for this weapon.

The first export contract for the AASM came from Morocco. Sagem sees Finland and India as potential customers for AASM, as well as Saudi Arabia. Riyadh

is purchasing an array of missiles to arm its upgraded Tornado and new Typhoon fighter aircraft. The AASM may be among the items acquired by the Royal Saudi Air Force. Other operators of French- and European-built aircraft may want to arm them with this strike weapon, perhaps even Libya. If export orders do not appear, our outyear numbers will drop by as much as a third.

As for the AS.30 Laser, production of this missile has ceased. No further domestic or foreign orders are anticipated. This missile does remain in service with the French military. So far, France has not said when it will procure a follow-on to the AS.30L.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR UNIT PRODUCTION												
Designation or Program	High Confidence				Good Confidence			Speculative			Total	
	Thru 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		2020
Sagem												
AASM												
	1,498	257	307	250	300	300	300	285	280	250	250	2,779
Total	1,498	257	307	250	300	300	300	285	280	250	250	2,779

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ORDER FORM FOR PROPER SHIPPING, PLEASE PROVIDE ALL OF THE FOLLOWING INFORMATION.

Name _____ Title _____

Company _____

Street Address _____

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Name of Product/Service	Code	E-Mail Address	Qty.	Price

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Subtotal _____
 Shipping _____
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 Grand Total _____

SHIPPING AND HANDLING RATES

	U.S.	World		U.S.	World		U.S.	World
Market Intelligence Services			Market Intelligence Libraries			Governments & Industries		
Binder	\$45	\$85	Complete Library			Binder	\$540	\$1,020
DVD	\$50	\$95	(Civil/Commercial & Military)			DVD	\$50	\$95
Binder & DVD	\$95	\$180	Binder	\$1,575	\$2,975	International Military Markets		
Binder & RT	\$45	\$85	DVD	\$50	\$95	(A Subset of G&I above)		
Worldwide Inventories			Military Market Library			Binder	\$270	\$510
Aerospace Systems			Binder	\$1,440	\$2,720	DVD	\$50	\$95
CD	\$50	\$95	DVD	\$50	\$95	Naval		
Weapons Systems			Civil/Commercial Library			Binder	\$90	\$170
Hard Copy	\$45	\$85	Binder	\$360	\$680	DVD	\$50	\$95
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Power Systems			Market Intelligence			Binder	\$90	\$170
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Focused Market			Aerospace			Weapons		
Segment Analyses			Binder	\$360	\$680	Binder	\$180	\$340
Hard Copy	\$25	\$45	DVD	\$50	\$95	DVD	\$50	\$95
			Electronics			NOTE: No charge for Real-Time format.		
			Binder	\$360	\$680	2011 Historic Art Calendar		
			DVD	\$50	\$95	\$5.95	\$12.95	

NOTE: ORDERS CAN TAKE UP TO 5 BUSINESS DAYS TO SHIP.

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Toll-Free: 800.451.4975 U.S. & Canada
Fax: 203.426.0223

E-Mail: sales@forecast1.com

E-Mail: info@forecast1.com

E-Mail: customerservice@forecast1.com

PROPRIETARY RESEARCH & CONSULTING

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Oxon, OX7 5LJ, U.K.
Phone: (44) 1608 643281
Fax: (44) 1608 641159
E-Mail: support@hawkinformation.com
Website: www.hawkinformation.com
Contact: Mr. Michael Hobbs

HAWK ASSOCIATES LTD.

FRANCE

6 Rue de Levis, Paris 75017 FRANCE
Phone: (33) 1 4294 0693 Fax: (33) 1 4294 0433
E-Mail: france@hawkinformation.com
Contact: Mr. Edward Hobbs

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Contact: Mr. Xiaoxiao Zhang

JAPAN

AVIATION RESEARCH INSTITUTE

1-427-2 Takano
Misato City Saitama Pref
Tokyo 341-0035 JAPAN
Phone: (81) 489 71 5040
Fax: (81) 489 55 7151
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