ARCHIVED REPORT

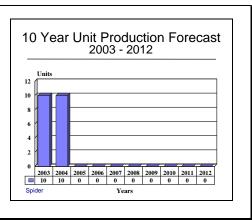
For data and forecasts on current programs please visit

www.forecastinternational.com or call +1 203.426.0800

Spider Expendable Jammer - Archived 01/2004

Outlook

- Any possible production for test and evaluation only
- System apparently passed over for other jammers in a crowded market
- Barring any future activity, this report will be archived in 2004



Orientation

Description. Defensive and offensive active expendable jammers covering D to F and G to K bands, tasked with airborne platform protection by decoying radar-guided missiles and by degrading the performance of hostile search radars.

Sponsor

EADS

Matra BAe Dynamics

20/22 rue Grange Dame Rose

F-78141 Velizy-Villacoublay

Yvelines Cedex

France

Tel: +33 1 34 88 30 00 Fax: +33 1 34 88 22 88

Web site: http://www.eads.net

Thales

Airborne Systems

Centre Rene Mouchotte

Le Clef de Saint Pierre

1 boulevard Jean Moulin

F-78852 Elancourt Cedex

France

Tel: +33 1 34 59 60 00 Fax: +33 1 34 59 62 36 Web site: http://www.detexis.thomson-csf.com

Contractors

EADS

Matra BAe Dynamics

20/22 rue Grange Dame Rose

F-78141 Velizy-Villacoublay

Yvelines Cedex

France

Tel: +33 1 34 88 30 00

Fax: +33 1 34 88 22 88

Web site: http://www.eads.net

Thales

Airborne Systems

Centre Rene Mouchotte

Le Clef de Saint Pierre

1 boulevard Jean Moulin

F-78852 Elancourt Cedex

France

Tel: +33 1 34 59 60 00

Fax: +33 1 34 59 62 36

Web site: www.detexis.thomson-csf.com

Status. Possible production for test and evaluation.

Total Produced. An estimated 200 prototype/developmental and operational units were produced through 2002.

Application. The two types of Spider airborne expendable jammers are intended to provide offensive

and defensive cover against surveillance and weapon-control radars. Suitable platforms include the Dassault Mirage 2000, Mirage F1, Mirage III/5/50, Mirage IV, and Transall C-160 aircraft.

Price Range. Indeterminate

Technical Data

Characteristics

Frequency coverage

Airborne/defensive G-K bands Airborne/offensive D-F bands

Design Features. Spider consists of an electronic payload incorporating monolithic microwave integrated circuitry (MMIC), a gallium arsenide amplifier, and a battery, fitted into a chaff or flare housing. The units have been developed to permit deployment from normal chaff launchers.

Operational Characteristics. Spider technology is able to defeat monopulse tracking, thereby aiding in the

defense against such current threats as active coherent missile homing heads. The defensive Spider model is intended for use against radars operating in the G-K radar frequency bands. The offensive Spider, able to remain airborne for up to 20 minutes, is intended to confuse and jam radars in the D-F bands by creating false targets. A primary tactical role for the latter will be the creation and protection of air corridors.

Variants/Upgrades

No variants or upgrades have been identified at this time.

Program Review

Background. Development of the Spider expendable jammer system is believed to have been initiated for the nuclear-delivery version of the Mirage 2000 (the 2000N). As is typical of French weapons developments, it was decided to maximize the Spider's export appeal by broadening its operational scope so that development of the system would also support and improve the performance of the Mirage 2000 aircraft sold on the export market. Spider was reported to be in

the advanced stages of development in 1995, and was believed to have been poised for full-scale production in 1999.

With virtually no new information available on the status of Spider since 2000, it would appear that the system either went into extended test and evaluation or has been scrapped in favor of other, established jammers. Also, the system has not been identified in association with any Mirage 2000 variant since 1998.

Funding

Design and development are thought to have been undertaken using corporate funding, the value of which has not been determined.

Recent Contracts

No contractual information has been made publicly available.

Timetable

<u>Year</u>	Major Development
1995	Spider in advanced development phase
1999	Production started (unconfirmed)
2000	Test and evaluation continues
2001	Developers of Mirage 2000 apparently establish Integrated Countermeasures Suite
	(ICMS) as preferred jamming system

Worldwide Distribution

France is the likely recipient of any Spider jammers produced to date (perhaps for Mirage 2000N, Mirage 2000D, and Mirage F1CR of the French Air Force). At this stage, any operator of Mirage-type aircraft can be considered a potential export client for production Spider systems.

Forecast Rationale

While France's Spider expendable jammer at one time was the subject of lengthy test and evaluation, no new information regarding the system's production status has been released since 1998. According to the manufacturer of Spider's potential primary platform, the Mirage 2000, the Integrated Countermeasures Suite (ICMS) has been chosen as the aircraft's principal jamming system.

From their early development stages, Spider jammers were designed to cover D to F and G to K bands and provide aircraft protection by decoying radar guided

missiles and degrading hostile search radar. Spider also has the capability to be installed on several other variants of the Mirage fighter.

Whatever future production there may now be for Spider may only be for test and evaluation. However, it is strongly suspected that the dearth of new information on the system since the late 1990s signals that it has simply been passed over by newer, more advanced jamming systems. Barring any reports of future activity, this report will most likely be archived in 2004.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR PRODUCTION

	Application	Thru 02	High Confidence Level				Good Confidence Level			<u>Speculative</u>			
Designation			03	04	05	06	07	08	09	10	11	12	Total 03-12
SPIDER	MIRAGE 2000 (FRANCE)	200	10	10	0	0	0	0	0	0	0	0	20

