



## AEA 218 / ANT 218

1.6 - 30 MHz NVIS ANTENNA SYSTEM  
FOR 125 W MOBILE STATION

**This antenna system is a new component of the SYSTEME 3000, the latest tactical HF ECCM multi-mode multi-service communications system well-known for its top level operational performance.**

**The NVIS-type antenna system is composed of an agile antenna tuning unit AEA 218 and of a whip antenna ANT 218 converted to a half-loop.**

**This system:**

- > offers full mobility between 0 and 1000 km with no skip zone
- > requires no special installation on the effective valley to valley transmission vehicle
- > has no visual signature
- > makes it possible to provide an NVIS mobile station at a very competitive price

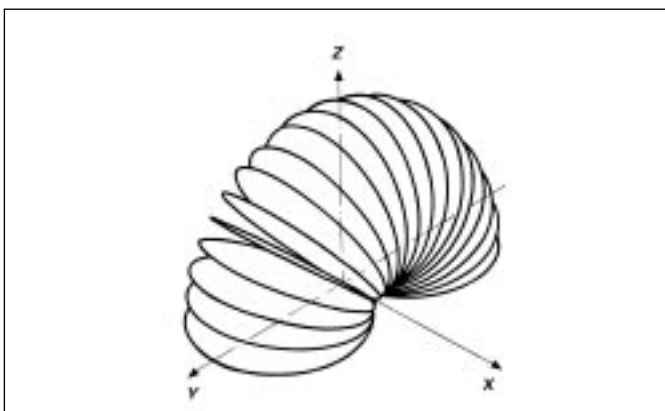


Starting with an original idea and its recognized expertise in tactical radio communications, THALES Communications has developed an innovative and cost-effective antenna system providing the means of increasing the reliability of radio links in the HF band from moving vehicles.

It is, in addition, compatible with all the modes and services of the SYSTEME 3000 providing discrete, robust and secure voice and data transmissions throughout the HF band.

This antenna system offers the user reliable transmission over short, medium, and long distances throughout the HF frequency band. Owing to a semi-toroidal radiation diagram, the NVIS (Near Vertical Incidence Skywave) propagation eliminates the skip zone found with vertical whip antennas.

It also provides omnidirectional communications and reduces the jamming susceptibility from ground wave jammers.



Installation of this system is identical and as simple as that of a TRC 3630 station with a whip antenna. Only an adapter for loopback of the whip antenna must be fastened to the vehicle. This loopback makes it possible to offer the performance of a genuine half-loop antenna and offers performance much higher than that of a horizontal whip antenna.

This approach also allows the station to be used with its whip antenna in the vertical position by simply releasing the antenna from its fastener.



This antenna system can be used to obtain a fully mobile station while, at the same time, benefiting from the performance of the TRC 3630 station. The antenna box is used to tune the half-loop antenna over the entire HF band (1.6 to 30 MHz) in the fast Automatic Link Establishment mode (ALE) or intelligent Frequency Hopping mode (FH).

The use of a whip antenna as a half-loop antenna allows to avoid a specific visual signature.



# THALES

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