

username

LOGIN

New Account »
Forgot Password?

chaff

GO

Advanced Search »

Ads by Google

Ale 47

US Government
Prime Contractor
for AN/ALE-47 is
Symetrics
Industries
www.Symetrics.com

US Army - Official Site

Earn \$2,000 when
you refer someone
to the Army.
Details inside!
www.army.mil

DIRECTV Official TV Offer

Up to 43% Off.
Free HD-DVR
Free HBO 265+
Channels, 130 HD.
Save \$580!
www.directstartv.com/DI/

Satellite & Aerial Images

Online maps &
images since
1997. Search &
view all photos for
free.
www.TerraServer.com

Detection and Countermeasures **Countermeasures**

The Use of Chaff in Space as a Jamming Device between Ground Stations and Satellites

Authors: [Alan R. Sterns](#); [AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF ENGINEERING](#)

Abstract: This study predicts the time evolution of the attenuation characteristics of a **chaff** cloud deployed in orbit around the earth. The study consists of three parts: applying the statistical mechanics solution of a satellite breakup model by William Heard of the Naval Research Laboratory, solving for particle density at any time after dispensing, and calculating the attenuation of an 8 GHz signal through the cloud. The study shows that significant levels of signal attenuation can be achieved, with attenuations of greater than -50 db lasting for several hours. Theses. (rh)

Limitations: APPROVED FOR PUBLIC RELEASE
Description: Masters thesis
Pages: 183
Report Date: DEC 88
Report Number: A775202

Keywords relating to this report:

- ✦ [ARTIFICIAL SATELLITES](#)
- ✦ [ATTENUATION](#)
- ✦ [CHAFF](#)
- ✦ [CLOUDS](#)
- ✦ [DENSITY](#)
- ✦ [EVOLUTION\(GENERAL\)](#)
- ✦ [GROUND STATIONS](#)
- ✦ [JAMMING](#)
- ✦ [MODELS](#)
- ✦ [NAVAL RESEARCH LABORATORIES](#)
- ✦ [PARTICLES](#)
- ✦ [SIGNALS](#)
- ✦ [SOLUTIONS\(GENERAL\)](#)
- ✦ [STATISTICAL MECHANICS](#)
- ✦ [THESES](#)
- ✦ [TIME](#)

Adobe PDF - \$35.95

Printed Format - \$39.95

ADD TO CART

Please check the box for the format you wish to order.

[Shipping Terms](#)
[About Electronic Delivery](#)

[Email This Abstract](#)

[« Back to search](#)