





Deutscher Fallschirmsportverband (DFV) e.V. Deutscher Aero-Club (DAeC) e.V. Luftsportgerätebüro Verband unabhängiger Prüfer von Luftsportgerät e.V.

An alle Vereine/Schulen/ Fallschirmtechniker, Fallschirmwarte

## **SICHERHEITSMITTEILUNG**

herausgegeben: 14.04.2011 Nummer: 08/2011

Bezug: Sicherheitsmitteilung der Firma Aviacom

SB AMMO050910/4 vom 5.4.2011 ersetzt : SB AMMO050910/3

Betroffene Muster: Argus Cutters hergestellt vor August 2007

Status: verpflichtende Modifikation vor dem nächsten Sprung!

Betrifft: Nutzung Cutter hergestellt vor August 2007

Grund: Das Service Bulletin SB mit # AMMO050910 / 3 wurde als vorbeugende

Maßnahme erteilt. Die Ergebnisse der umfangreichen Tests mit Cuttern die bis August 2007 hergestellt wurden, haben keine Beeinträchtigung der Performance gezeigt. Aviacom ermöglicht somit eine weitere Verwendung dieser Cutter in allen Gurtzeugen mit Cuttern auf der Unterseite des Reserve-Container (z.B.

Javelin, Wings) oder unter dem Hilfsschirm.

Maßnahmen: Bis zum Abschluß der Untersuchung ist die Verwendung dieser Cutter nicht

erlaubt, wenn der Cutter über dem Hilfsschirm angeordnet ist.

Es sind nur Cutter die nach August 2007 hergestellt sind, für den Einbau über dem Hilfsschirm zugelassen. Das Herstellungsdatum der Cutter kann auf dem

Label am Kabel ermittelt werden.

Durchzuführen bis: sofort

Bemerkungen: Die Reserve muss mit einem Druck auf den Hilfsschirm von mindestens 5 kg

oder 10 Pfund gepackt werden.

Batterien müssen nach jedem Repack ersetzt werden, nach jeder Aktivierung

oder alle 500 Sprünge (was zuerst zutrifft!)

Laut Hersteller ist das aktuelle Manuel zu beachten!

Diese Sicherheitsmitteilung ersetzt folgende SB AMMO050910/3

im Anhang: SB AMMO050910/4 vom 5.4.2011

Zur Info:Auswertung des Cutter vom Vorfall San Marcos 21.Febr.2011

Verteiler: Techniker, Warte, Händler, Vereine, Sprungzentren.

Dresden, den 14.04.2011

Chris Buß - Referat Technik DFV

Ralf Homuth – Geschäftsstellenleiter VuPL





# PRODUCT SERVICE BULLETIN

Issue date: 5 April 2011

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Bulletin number: SB AMMO050910/4 -This Service Bulletin replaces SB AMMO050910/3

Subject: Argus Cutters Manufactured till August 2007

**Identification:** Argus Cutter with manufacturing dates Aug. 07 or earlier and manufactured for the

Argus AAD by Nobel Energetics

#### Background:

The original service bulletin with # SB AMMO050910/3 had been issued as a preventive measure.

The results of extensive tests with cutters manufactured up to August 2007 have shown no lack of performance. Aviacom therefore allows continued use of these cutters in all harness/containers with the cutter installed on the bottom of the reserve container (e.g. Wings) or below the pilot chute.

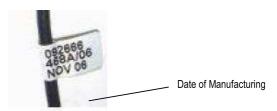
Pending investigation, the use of these cutters is not allowed if placed on top of the pilot chute (e.g. Mirage, Icon...)

#### Service bulletin:

Based on our testing and analysis, there is no longer a need to replace cutters placed below the pilot chute, so the mandatory cutter replacement is no longer required, and the previous bulletin does not apply for those configurations.

The previous bulletin, however, remains in effect for rigs with cutters placed above the pilot chute, requiring their replacement at the next repack. Due to factors beyond our control, the supply of replacement cutters has been delayed by the manufacturer of that component. We apologize for this situation. At present, it is permissible to swap the older and newer cutters between Argus AADs in different rigs, to insure that cutters above the pilot chute are returned to service with the newer version. We are continuing to test that configuration, and will issue a subsequent bulletin when we can confirm the best course of action for cutters placed above the pilot chute. At present, we can only authorize the newer cutters for the configurations where the cutter is placed above the pilot chute.

The cutter's manufacturing date can be identified by the cable tag:



All riggers must ensure themselves that the Argus is installed according to the manufacturer's guidelines as described in the installation manual.

### It is up to each person to obey FAA 14 CFR § 105.43 (c):

"If installed, the automatic activation device must be maintained in accordance with manufacturer instructions for that automatic activation device".

("Title 14, Code of Federal Regulations, Part 105, section 43, subsection c".)

LOOP MATERIAL, SILICONIZING AND LOOP LENGTH ARE IMPORTANT TO ASSURE A CLEAN CUT.



#### Loop tension:

The reserve must be packed with a pilot chute pressure of minimum 5 kg or 10 pounds.

It is a riggers' responsibility. In other words: do use a short loop and keep in mind the loop stretch. Batteries have to be replaced after each scheduled repack, or after each activation, or every 500 jumps, whatever comes first.

Compliance date: Immediately

Authority: Aviacom SA

Karel Goorts, Managing director

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The distribution list shall include but is not limited to:

• All dealers and owners/customers for with addresses are on file.

• PIA Technical Committee

- IPC Technical Committee
- All parachuting periodicals
- National Aero Clubs-Parachuting sections



07 April2011

# **Argus Cutter investigation - Incident San Marcos TX**

Cutter:

Manufacturer: Chemring Energetics, Stevenston, UK

Model: DR 5010 DOM: April 2008 Serial number: 092666 Batch number: 136A/08

Aviacom SA requested our company to investigate the cutter involved in the so called `San Marcos' incident.

The initial inspection revealed a pinched loop that was cut on one side, and not cut on the other side. There were some loop fibres visible on the cut side.



Picture 1: Disc cut with disc tools



Picture 2: top separated from the body.



Picture 3: loop came off - together with the blade.

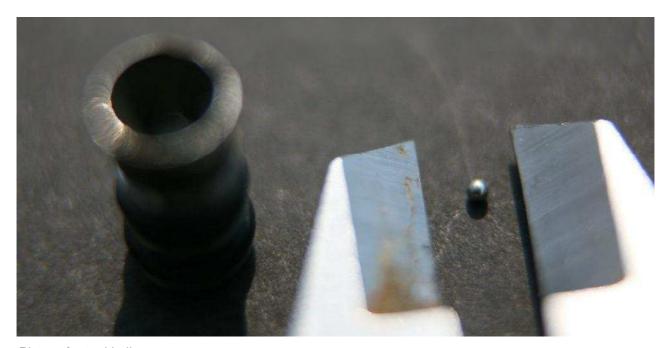


Picture 4: The edge of the bullet cutter was damaged on one side and showed two burrs.



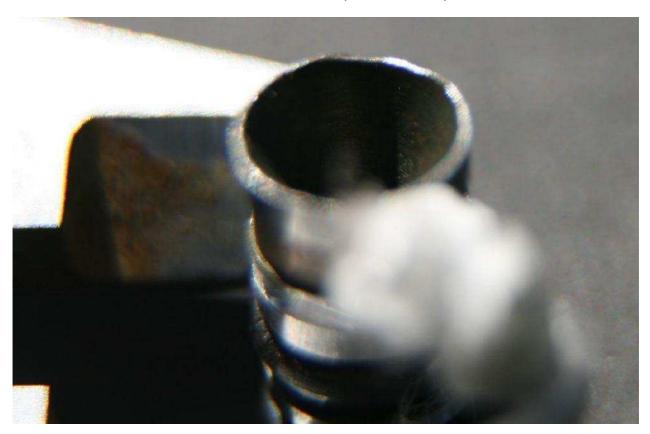
Picture 5: The cutting edge of the blade is damaged

Upon removal of the pinched loop from the bullet cutter, a small metal foreign object fell out of the cup of the cutter. . Since the metal object was found between the loop and the blade, it is likely that it entered the cutter before the loop was inserted or later through the same hole. This looks like a small steel ball, as used in 'shot bags'



Picture 6: steel ball

The cutter blade also showed a deformation at the place of the loop.

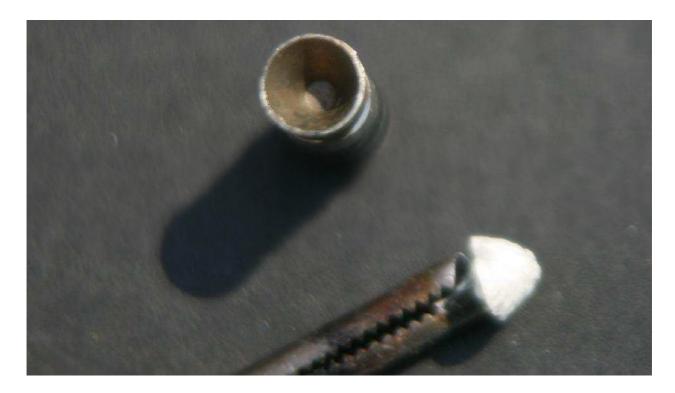


Picture 7: Damage caused by ball?

In order to compare, two more cutters were opened according to the same procedure. A molten cone of loop material was found in each cup of the bullet cutter.



Picture 8: Comparative cutter open (DOM Aug 2007)



Picture 9: Comparative cutter – Nice molten cone of Spectra fiber (Cutter DOM Aug 2007)

The combination of the damaged cutter edge and the foreign object may have obstructed the complete cutting of the loop, since blade and anvil could not connect properly and the thermal cutting energy probably was partially lost since the loop showed no melting marks.



Picture 10: The trapped/pinched loop of the 'San Marcos' cutter

The blade could not perform its full stroke and thus not cut the loop completely.

#### Conclusion:

The cutter was damaged in use. It is impossible to reinsert the damaged blade back in the cutter, so this could not have occurred in the factory.

Without the damage, there is no reason why the cutter should not have performed as designed. The loop material could not have caused any damage to the hardened stainless steel blade.

### **Recommendation:**

Cutters have to be inspected at each repack for foreign objects that could interfere with the correct functioning of the cutter.

Signed,

## **Arnold Camfferman**

FAA Senior Rigger #VVX AFF Instructor UPT Tandem master examiner 15000 jumps