

Project: **SATELIT+ GENERATION 2**Client: **DUVAL MESSIEN**Office: **LYON**Clients Order Number: **BC06054 dated 26.01.2006**Date: **30 March 2006**Order Status: **Incomplete**

Inspection Dates

First: **01 March 2006**Final: **01 March 2006**

This certificate is issued to

DUVAL MESSIEN. At their request, the undersigned surveyor to this Society attended SEDIVER laboratory (Centre d'Essais de Bazet), Bazet, France, in order to witness tests on the following equipment:

1 (one) EARLY STREAMER EMISSION LIGHTNING CONDUCTOR SATELIT + TYPE G2- 60

Test standard: NFC 17 – 102/1995 Appendix C, CEB test report No. : 1282-06.

The following scope of inspection was carried out against order and specification requirements:

Calibration of measuring instruments was verified against available records and found to be acceptable,
Dimensions of testing configuration were measured in presence of Surveyor (see details in laboratory's test report),
Application of impulse waves as recorded in laboratory's test report was witnessed by Surveyor on both simple rod lightning conductor (Franklin rod type) and SATELIT + G 2 -60 , records were verified and endorsed by Surveyor,

Atmospheric conditions were measured in presence of Surveyor before and after tests, records were verified and endorsed by Surveyor,

Comparison of Franklin rod type and SATELIT + G 2 -60 gave the following results (see test standard and laboratory's test report for details on calculations):

$$\Delta T = T_{PTS} - T_{PDA} = 101 \mu s$$

All the above checks and tests gave satisfactory results, and, so far as could be seen, the testing procedure applied to the lightning conductors was found to comply with test standard requirements.

V. BOUTINEAU for H.WALLE
Surveyors to Lloyd's Register EMEA

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Projekat: SATELIT + Generacija 2

Stranka: DUVAL MESSIEN

Broj naloga stranke: BC06054, datum 26.01.2006.

Datumi kontrole

Prvi: 01. mart 2006.

Kancelarija: Lion

Datum: 30. mart 2006.

Završni: 01. mart 2006.

Ova potvrda se izdaje za:

DUVAL MESSIEN. Na njihov zahtev, dole potpisani kontrolor ovog društva je prisustvovao u SEDIVER laboratoriji (Centar za testiranje u Bazetu), Bazet, Francuska, kao svedok ispitivanja sledeće opreme:

1 (jedan) ESE GROMOBRAN SA UREĐAJEM ZA RANO STARTOVANJE SATELIT + TIP G2- 60

Standard ispitivanja: NFC 17 - 102/1995 Dodatak C., CEB izveštaj testa Br.: 1282-06.

Sledeći opseg ispitivanja je sproveden na osnovu naloga i potrebnih tehničkih karakteristika: Regulacija mernih instrumenata je potvrđena na osnovu dostupne evidencije i utvrđeno je da je prihvatljiva.

Veličine testirane konfiguracije su merene u prisustvu kontrolora (videti detalje u laboratorijskom izveštaju ispitivanja).

Primenom impulsa talasa, kako je zabeleženo u laboratorijskom izveštaju ispitivanja je prisustvovao kontrolor i za klasičan štapni gromobran (tip Franklinov štap) i za SATELIT + G2 - 60, evidencija je potvrđena i odobrena od kontrolora.

Atmosferski uslovi su mereni pre i posle ispitivanja u prisustvu kontrolora, evidencija je potvrđena i odobrena od kontrolora.

Poređenje gromobrana tipa Franklinov štap i SATELIT + G2 - 60 dalo je sledeće rezultate (videti standard testa i laboratorijski izveštaj ispitivanja za detalje proračuna):

$$\Delta T = T_{PTS} - T_{PDA} = 101 \mu s$$

Sve gore navedene provere i ispitivanja daju zadovoljavajuće rezultate, i do sada kao što se moglo videti, postupak ispitivanja primenjen na gromobrane je pokazao da je u skladu sa zahtevima standarda ispitivanja.

V. BOUTINEAU for H. WALLE
Kontrolor za Lloyd-ov Iskaz EMEA

Član Lloyd-ove grupe za Iskaze

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