

**BREVET DE TECHNICIEN SUPERIEUR
- GROUPE 17 -**

Assistant en création industrielle
Conception de produits industriels
Conception et réalisation de carrosseries
Constructions navales
Etude et réalisation d'outillages de mise en forme des matériaux
Industries céramiques
Industries des matériaux souples
Industries papetières
Maintenance et après vente automobile
Maintenance et après-vente des engins de travaux publics et de manutention
Maintenance industrielle
Mécanique et automatismes industriels
Mise en forme des alliages moulés
Mise en forme des matériaux par forgeage
Moteurs à combustion interne
Plasturgie
Productique bois et ameublement
Productique mécanique
Réalisation d'ouvrages chaudronnés
Traitements des matériaux

**LANGUE VIVANTE ETRANGERE
EPREUVE D'ANGLAIS**

DUREE : 2 HEURES
COEFFICIENT : 2

L'usage du dictionnaire bilingue est autorisé
Calculatrices et traducteurs électroniques sont interdits

Dès que le sujet vous est remis, assurez-vous qu'il soit complet.
Le sujet comporte 3 pages, numérotées de 1 à 3.

BREVET DE TECHNICIEN SUPERIEUR - GROUPE 17	Session 2005
EPREUVE DE LANGUE VIVANTE : ANGLAIS	Code : LVE 8 AGL
Durée : 2 Heures	Page 1/3

CRASHED CARS TO TEXT MESSAGE FOR HELP

By James RANDERSON

There is no good place to have a car crash - but some places are worse than others. In a foreign country, for instance, trying to explain via cell-phone that you are upside down in a ditch when you cannot speak the local language can fatally delay the arrival of the emergency services.

5 But an answer may be at hand. Researchers funded by the European Commission are beginning tests in January of a system called E-merge that automatically senses when a car has crashed and sends a text message telling emergency services in the local language that the accident has taken place.

10 The system was developed by a transport research organisation based in Brussels, Belgium. Cars are fitted with a cell-phone-sized device attached to the underside of the dashboard, which is activated by the same sensor that triggers the airbag in a crash. The device includes a cell-phone circuit, a GPS positioning unit, and a microphone and loudspeaker.

15 It registers the severity of the crash by reading the deceleration data from the airbag's sensor. Using GPS information, it works out which country the car is in, and from this it determines in which language to compose an alert message detailing the precise location of the accident. The device then automatically makes a call to the local emergency services operator.

20 E-merge also transmits the vehicle's make, model, colour and licence number, and its heading when it crashed, which in turn indicates on which side of a multi-lane highway it ended up. This helps the emergency services find the vehicle as soon as they arrive on the scene. "We can waste a large amount of time searching for an incident," says Jim Hammond, an expert in vehicle technology at the Association of Chief Police Officers in the UK.

25 A study by French carmaker Renault concluded that the system could save up to 6000 of the 40,000 lives lost each year on Europe's roads, and prevent a similar number of serious injuries. Fitting E-merge to every car in Europe would eventually save around €150 billion per year in terms of reduced costs to health services and insurance companies, and fewer lost working days.

[380 words]

Adapted from *New Scientist Online News* 19:00 14 January 04

BREVET DE TECHNICIEN SUPERIEUR - GROUPE 17	Session 2005
EPREUVE DE LANGUE VIVANTE : ANGLAIS	Code : LVE 8 AGL
Durée : 2 Heures	Page 2/3

TRAVAIL A EFFECTUER PAR LE CANDIDAT

I. COMPREHENSION (10 points)

Rédigez un compte-rendu du texte ci-joint. Vous veillerez à restituer les éléments importants **dans un français de qualité**, et indiquerez le nombre de mots utilisés.

(220 mots plus ou moins 10%)

II. EXPRESSION (10 points)

Répondez **en anglais** aux deux questions suivantes :

- a) Using the information found in the text, explain, in your own words, how the E-merge system will save lives.

(5 points)

(about 100 words)

- b) Do you think on-board intelligence (on-board computers, microprocessors, environment sensors, GPS and other electronic systems) assists drivers or reduces their sense of freedom?

(5 points)

(about 100 words)

BREVET DE TECHNICIEN SUPERIEUR - GROUPE 17	Session 2005
EPREUVE DE LANGUE VIVANTE : ANGLAIS	Code : LVE 8 AGL
Durée : 2 Heures	Page 3/3