

ERIK CARLSSON
29 Cooper Lane
Chester, NJ 07930
erikcarlsson1@msn.com
908-879-9600 Fax 908-879-9601

PROFESSIONAL ASSOCIATIONS:

I am a member of the Society of Automotive Engineers (S.A.E.); the American Society of Safety Engineers (A.S.S.E.); the National Association of Professional Accident Reconstruction Specialists (N.A.P.A.R.); and the American Society of Swedish Engineers. Formerly a Fellow of the American College of Forensic Examiners.

HIGHER EDUCATION:

Gothenburg Institute of Technology, Department of Motor Engineering, Gothenburg, Sweden: Engineering Degree 1959 in Automotive Engineering.

[In the absence of uniform standards and requirements among learning institutions in the U.S., it is not possible to make a direct comparison in education in technology between Sweden and the U.S. In Sweden more emphasis is placed on Mathematics, Physics, and foreign languages, as basic education, than in the U.S. Further, the Institute requires students to obtain applied field experience by means of an apprenticeship or paid internship prior to graduation.]

HONORS: Awarded the Prize for Highest Academic Achievements, and a Scholarship for studies in Applied Motor Engineering at Fichtel & Sachs, AG, West Germany (a manufacturer of automotive components and engines).

**NAPARS: Event Data Recorders and Crush Documentation and Analysis, September 2002*

**SEAK Inc.,: Law School For Experts, June 2000.*

**SEAK Inc.,: Ninth Annual National Expert Witness And Litigation Seminar, June 2000;*

**Texas Association of Accident Reconstruction Specialists: Conspicuity & Reaction testing, Vehicle Braking Performance; Vehicle Stability and Rollover; Low Speed Rear-End Collisions, 1994;;*

**Arkansas State University/National Traffic Safety Board: Commercial Vehicle Accident Investigation and Reconstruction, 1993;*

**Compu-Tech, Ledgewood, New Jersey: Computer Programming, 1983;*

**University of Stockholm, Sweden: Psychology and Supervision, 1966;*

PROFESSIONAL EXPERIENCE:

A&C AUTOMOTIVE CONSULTING

29 Cooper Lane [Annex]
Chester, NJ 07930-2637

1982-1985, 1987-present

AUTOMOTIVE CONSULTANT, specializing in traffic accident reconstruction and analyses; vehicle dynamics; vehicle safety standards, vehicle defect examinations; performance and usage of restraint systems.

VEJDIREKTORATET,

Oslo, Norway
1986-1987:

ASSIGNMENTS:

Evaluating the Norwegian Vehicle Safety Standards, proposing revisions of the standards to be promulgated by the Norwegian Department of Transportation.

*VOLVO OF AMERICA CORP.,
Rockleigh, NJ 07647
1978- 1982:*

*ENGINEERING ANALYST in the Product Planning and
Development Department.*

*Major Duties: Endurance and Performance tests of prototype
vehicles and vehicle components and systems; Monitoring and
assessing technological developments in the U.S. auto markets
on behalf of the parent company, AB Volvo, Sweden; Assisting
the Product Quality Department with identifying and solving ve-
hicle problems.*

*THE SWEDISH ROAD SAFETY
OFFICE
Stockholm/ Sweden.
1975-1978*

ASSISTANT CHIEF ENGINEER

Major responsibilities:

*Promulgating vehicle safety standards and specifying technical
requirements for motor vehicles, including heavy vehicles;*

*Representing the Swedish government in international meetings
regarding vehicle requirements of international interest;*

*Advising the Department of Transportation in matters concerning
safety of heavy vehicles;*

*Generate mathematical formulae for computer programs used
for the computations of the load-carrying capacities of various
commercial vehicle types;*

*Assist police departments, when requested, in traffic accident
reconstruction, speed analyses, and examinations of vehicles in-
volved in accidents. Testifying in traffic accident cases when re-
quested by prosecutors.*

*In addition, I was also called upon to conduct lectures for
automotive engineers in such subjects as Strength of Materials,
and Vehicle Dynamics, including Accident Reconstruction.*

*INTERNATIONAL PUBLISH
NEWS (IPN), Zurich,
Switzerland
1973-1975*

*I joined this investment firm as a partner in 1973. Remained
active in the firm until my appointment by the Swedish Road
Safety Office in January 1975.*

*DEPARTMENT OF AGRI-
CULTURE,
Nairobi, Kenya
1971-1973*

ASSIGNMENTS:

*Establishing new procedures for the operation of the Depart-
ment's Transport Section that was operating a fleet of some
400 trucks, Land-Rovers, and cars, and for the section's seven
workshops in Kenya;
training and instructing new mechanics;
participating in the procurement of equipment for the workshops.
Additionally, as Advisor to the Purchasing Manager, I assisted in
the evaluation of technical merchandise, including trucks.*

DEPARTMENT OF TRANSPORTATION,
New South Wales, Sydney,
Australia.
1970-1971.

ASSIGNMENTS:

Drafting a comprehensive proposal for revision of the vehicle safety standards, and guidelines for the vehicle inspectors at a proposed new vehicle inspection system

KENWORTH MOTOR TRUCKS (AUSTRALIA) LTD., Sydney.
1969-1970

ASSIGNMENTS:

Establishing assembly methods for truck and truck components at a new assembly plant in Melbourne and at an existing one in Sydney;

Specifying design parameters of truck components manufactured by local firms (e.g. truck bodies, fuel tanks, fasteners, brackets, etc.).

NKI-SKOLAN, Stockholm
Sweden
1963-1966

INSTRUCTOR (Evening job):

Courses: Mathematics (two courses), Automotive Technology (four courses), and Heavy Diesel Engines (two courses).

SVENSKA AEROPLAN AB (SAAB), Sweden
1963-1964

FLIGHT TEST ENGINEER**Major duties:**

Calculation of stress in airplanes components;

Writing programs for flight tests; Analyzing test results and reporting thereof to the management and to the Swedish Air Force.

SWEDISH VEHICLE INSPECTION COMPANY
(formerly the Swedish Road Board) Stockholm, Sweden.
1965-1969
1960-1963

VEHICLE SAFETY ENGINEER**Major duties:**

Safety and registration inspections of motor vehicles and trailers; Calculations of stress in truck and trailer chassis

and determination of their load-carrying capacities;

Translating directives from the Road Safety Office to technical directives for vehicle inspectors;

Testing driving skill of applicants for commercial driver's licenses;

Assisting police officers in accident reconstruction and vehicle safety inspections;

In addition, I participated in the establishment of a training program for vehicle inspectors.

PRE-GRADUATE WORK EXPERIENCE:

I practiced as a truck and auto mechanic in the trucking business and in the military, as well as serving as an instructor for truck drivers in the military, prior to my admission to Gothenburg Institute of Technology.

APPOINTMENTS:

I was appointed in 1966 by the Swedish Department of Transportation as an automotive expert in a work group assigned to generate a proposal for a long-term vehicle safety standard plan. My assignment included vehicle strength tests and high speed crash tests with different types of vehicles performed in order to determine the differences in crash-worthiness

among different vehicle types, and the effectiveness of restraint systems .

PUBLICATIONS:

I have published the following:

A comprehensive paper dealing with the computation of stress in truck and trailer chassis. This paper became a fundamental part of the curriculum of the training program for Grade A vehicle inspectors at the Swedish Vehicle Inspection Company. It has also been published in a manual for military vehicle inspectors;

Numerous articles about new vehicle technologies for an in-house periodical (PROVNINGAR OCH PRÖVNINGAR) at the above company;

A paper, based on a scientific study concerning heavy vehicles' dynamic stability, presented in "layman's" terms for the Swedish Department of Transportation;

"SIMPLIFYING MOMENTUM CALCULATIONS," ACCIDENT RECONSTRUCTION JOURNAL, March/April 1991;

"LESS KNOWN SEAT BELT PROBLEMS," ACCIDENT RECONSTRUCTION JOURNAL, March/April 1992;

"DELTA-V AND THE COMBINED SPEED FORMULA," and "COEFFICIENT OF FRICTION AND HEAVY VEHICLES," presented at the Canadian Association of Technical Accident Investigators & Reconstructionists' August 1993 seminar, Saskatchewan, Canada;

"ANIMATION OF PERFECTLY PLASTIC VEHICLE CRUSH," SAE publication 940921, SAE International Congress, Detroit, 1994. (Co-authored, together with professor R. W. McLay and D. J. Anderson, ACE, Inc.);

"DELTA-V AND THE COMBINED SPEED FORMULA," published (modified) in ACCIDENT INVESTIGATION QUARTERLY, Issue 1, Winter 1994;

I have written a number of articles for a professional Swedish journal," MEDLEMS-BLADET, (Swedish), such as (titles only in English):

** "An American Norwegian Story," March 2001 Issue;*

"Roof," December 1998 issue. [This article deals with a collision test in Arizona between cars and a "deer," demonstrating the safety effect of the difference in roof strength between the tested vehicles];

** "A 'Differenter' Norwegian Story," September 1998 Issue;*

* *"From Beer Carrier in Falun to Witness Exhibit in Texas," June 1998 issue. [This articles deals with a law case in Texas involving a single vehicle (truck) accident where three accident reconstructionists, retained by the defendant, attempted to blame an innocent victim for the accident by presenting erroneous and misleading conclusions.];*

* *"A Different Norwegian Story (A true 'Norwegian' story)", December 1997 Issue;*

* *"The Peculiar Herr Berg," September 1997 Issue:*

* *"Orderliness and Methods there should Be," June 1997 Issue;*

* *"A Journey In a Messerschmitt," March 1997 Issue;*

* *"To Buy A Car in Kenya," December 1996 Issue.*

LANGUAGES:

Danish, English, German, Norwegian and Swedish. Some knowledge of Spanish and Swahili.

MISCELLANEOUS:

I have passed tests in Mathematics and in Science at a university and a technical college, in the U.S., as requested by New Jersey Department of Education for meeting the Department's requirements for certification as a teacher in Mathematics, Physical Science, and Comprehensive Science;

I have testified in courts throughout the United States and in Europe as an expert in Accident Reconstruction and Vehicle Safety Matters for both plaintiffs and defendants.

I am licensed by New Jersey Division of Motor vehicles as a Qualified Driving Instructor;

I have worked as an instructor for car and truck mechanics in the U.S., Kenya and Sweden;

I am a holder of Private Pilot's License with Night VFR-rating;

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INGENJÖRSEXAMEN.

English Translation:

ENGINEERING DEGREE

THE GOTHENBURG INSTITUTE OF TECHNOLOGY, GOTHENBURG, SWEDEN.

John Erik Albert Carlsson, born at SKEE, has graduated from THE DEPARTMENT OF MOTOR ENGINEERING AT THE INSTITUTE, and has received the following grades:

Mathematics	PASSED WITH GREAT DISTINCTION	Testified by: B. Frantzich, M.E.
Physics	PASSED WITH GREAT DISTINCTION	B. Frantzich, M.E.
Mechanics	PASSED WITH GREAT DISTINCTION	G. Gran, M.E.
Thermodynamics	PASSED WITH DISTINCTION	G. Gran, M.E.
Strength of Materials	PASSED WITH DISTINCTION	M. Hallberg, M.E.
Graphical Static	PASSED WITH DISTINCTION	A. Mattson, M.E.
Electrical Engineering	PASSED WITH DISTINCTION	M. Strömberg, E.E.
General Constructional Drawing	PASSED NOT WITHOUT DISTINCTION	E. Ekman, M.E.
Combustion Chemistry with Laboratory Tests	PASSED WITH DISTINCTION	B. Lundberg, C.E.
Applied Mechanics incl. Designing	PASSED WITH DISTINCTION	B. Trägårdh, M.E.
Machine Tools	PASSED WITH GREAT DISTINCTION	J. Pettersson, M.E.
Automotive Engineering	PASSED WITH GREAT DISTINCTION	G. Wedelfors, M.E.
Automobile and Engine Construction	PASSED WITH DISTINCTION	G. Wedelfors, M.E.
Aeronautical Engineering	PASSED WITH GREAT DISTINCTION	Ewe-Ericson, Principal
Internal Combustion Engines:		
Motor Theory	PASSED WITH DISTINCTION	G. Wedelfors, M.E.
Carburetor Engines with Laboratory Tests	PASSED WITH GREAT DISTINCTION	Ewe-Ericson, Principal
Diesel Engines with Laboratory Tests	PASSED WITH DISTINCTION	I. Falkman, M.E.
Industrial Economics	PASSED NOT WITHOUT DISTINCTION	R. Karlsson, I.E.
Jet Engines	PASSED WITH DISTINCTION	Ewe-Ericson, Principal
Nomography	PASSED WITH DISTINCTION	B. Frantzich, M.E.
Mechanical Engineering	PASSED WITH DISTINCTION	B. Trägårdh, M.E.

AWARDED THE INSTITUTE'S PRIZE FOR HIGHLY SUCCESSFUL STUDIES

Gothenburg, 22nd May, 1959

R. Ewe-Ericson
Principal