*Tech*LINK

Number 55 December 1998

Merry Christmas and a Happy New Year!

from all of us at **REHAB** ***Tech!***

"Perfectly" shaped cosmetic foam covers?

In the October ***Tech*LINK** (Number 53) we reported on work which yields a highly cosmetic prosthesis as part of the *rapid prototyping technology collaboration* with Swinburne University. The technique has been developed to allow the trans tibial socket to be "morphed" or blended with the reverse image of a client's other limb to form an ideal cosmetic shape — part of the CAD CAM research, education and manufacturing support work that **REHAB*Tech*** has been doing over the past two years.

We have since trialed the technique successfully on a conventional foam cover for a modular trans tibial prosthesis. The foam cover is carved by the CAD CAM machine and is a "perfect" blend of the mirror image of the client's sound leg shape, but still allowing for the socket and components.

Figure 1 - the foam cover as shaped by the technique, ready for fitting to the prosthesis.

Please address correspondence to: The Editor- *Tech* LINK
c/o REHAB *Tech*, 260-294 Kooyong Road, Caulfield Vic 3162, Australia.
Telephone: +61 3 9528 1960, Facsimile: + 61 3 9528 1077, *e-mail*: REHAB.Tech@eng.monash.edu.au
INTERNET - http://www.monash.edu.au/rehabtech/

ARATA

ANNUAL GENERAL MEETING - December 8 at 5 PM

Fourth Annual General meeting of **ARATA** will be held by teleconference on the 8th of December at 5 PM Eastern SUMMER Time

The following is the list of people who will be advertised have agreed to be contacted for sharing of their teleconference line via speaker phone.

Barry Seeger (Adelaide, phone 08 243 8261)
Ralph Farnbach (Canberra 02 6244 2475)
Bill Fisher (Sydney 02 9926 8755)
Raelene Smith (Sydney 02 9890 0100)
Bill Contoyannis (Melbourne 03 9528 1960)
Trevor Jones (Perth 08 9382 7557)
Kerry Whittle (Davenport 03 6427 9411).

REHAB *Tech* PROJECTS UPDATE

MOMENTS AROUND THE ANKLE BY THE USE OF ELASTIC STRAIN ENERGY FOOTWEAR

Studies covering the effects of an energy returning sole are divided on the benefits of an elastic strain energy shoe (e-shoe), intended to absorb and return energy during walking. It is believed that a runner's kinematics are altered to compensate for changes in footwear. The aim of this study was to determine the moments around the ankle when walking with a conventional shoe and with the e-shoe. This was to assess a possible change in the kinematics with the use of the e-shoe and to investigate if the e-shoe has the same properties in clinical use as in the technical tests previously performed.

Data was taken from 11 subjects for walking with a conventional shoe and with the e-shoe. Vertical force, anterior/posterior force, moment and power were calculated from the data and a comparison between the shoes was made with the use of a paired sample t-test.

Although the data showed no significant differences between a conventional shoe and the e-shoe in relation to the ankle moment, the subjects reported feeling more comfortable walking with the e-shoe. More work to explain this result. A more homogenous group and more trials per subject are needed to give a clearer view on the effect of the e-shoe on walking.

(E-shoe study conducted by Stefan van Drongelen and Evert Verhagen 1998 and can be found on our Website http://www.monash.edu.au/rehabtech)

Coming Events

2–4 December	**Clinical Management of Amputees**, Auckland, New Zealand. Contact **REHAB*Tech*** for details
8 December	**Fourth Annual General Meeting of ARATA** - see State contact details in ***Tech*LINK** for participation
23 December 1998 - 3 January 1999	**REHAB*Tech* - *CLOSED for holiday break!Please feel free to email us and use the time to check out new additions to the Website!***

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