

# FLUID

# TALK

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The International Organisation for Fluid  
Power & Motion Control Professionals

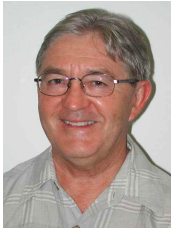


## Official Newsletter of The International Fluid Power Society of Australia (Inc)

### President's Prologue

by Tim Bailey

#### Welcome.....



to the first issue of The International Fluid Power Society of Australia's first *e-magazine*. Your new *Fluid Talk* magazine will now come to you on your computer at

the rate of about 12 issues each year with each e-magazine article being permanently held on the IFPSA website so that all you have to do to read the article is to click on the heading in your e-magazine. In this way, you'll always be able to easily access articles such as information on what to do if you or one of your workmates receives a fluid injection injury and who has moved to where in the industry.

Your committee considered a number of factors relating to keeping The Society's membership informed of all sorts of interesting matters to do with IFPSA activities and the fluid power industry in general before the decision was made to change to this new way of communicating with The Society's membership and many other interested people.

Amongst the factors considered was that of providing information as soon as possible after it became available and the cost of providing the information. The ability of the e-magazine to disseminate information quickly is obvious but the reduction in cost to The

Society is less obvious. The hard copy issues of *Fluid Talk* cost about \$3 each to produce whereas the e-magazine costs about \$1 per copy to produce – and we save a few trees!

Please let us know how you find the new format *Fluid Talk* - any comments and suggestions that you may have about it will be appreciated.

#### Fluid Power Licensing

A formal letter from The IFPSA was sent to the Minister for Finance; Commerce; Small Business in the Western Australian government, earlier this year, setting out The Society's proposal that the government should enact legislation to establish a licensing system for fluid power fitters and high pressure hose assemblers similar to that already existing in the areas of, for instance, electrical work, water plumbing and domestic/industrial gas fitting.

The submission noted that fluid power is an area of engineering where high to very high fluid pressures and flow are used to transmit energy so exposing fluid power personnel and the general public to the possibility of injury and death due to equipment failures yet no effective statutory legislation existed in Western Australia which required a person who worked on fluid power equipment to have demonstrated their competence to a regulatory authority.

A response was received from Mr. B. Bradley, Director General of the government of Western Australia's department of commerce saying that he thinks that the matter should be considered at a national level through *Safe Work Australia*.

He suggested that The Society should make an approach to that body whilst 'reassuring' The Society that even though no licensing requirements existed in the area of fluid power engineering in WA, the WA Occupational Safety and Health Regulations 1996 ('OSH Regulations') contained certain mandatory requirements applicable to employers and other 'duty holders' ...to ensure appropriate measures are taken and followed when working on plant that has fluid-pressurised systems containing energy sources.

Mr. Bradley also said in the letter that OSH Regulation 4.43 ...requires compliance with certain Australian Standards in regard to the installation, commissioning, operation, maintenance and inspection of all pressure equipment to which AS/NZS 1200 – Pressure Equipment – applies.

The fact is that the OSH Regulations and AS/NZS 1200 use terms such as 'appropriate' and 'competent person' in describing the duties and qualifications of a person considered suitable to deal with, say, 1000 kW of energy being transmitted through an industrial fluid

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## Fluid Power Licensing

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power system at a pressure of, say, 350 bar. whereas a person can be prosecuted for tightening a loose wire on a 2.4 kW capacity electrical plug in their home in Western Australia because they are not a licensed electrician!

The argument is obvious and clear-cut in that **either the licensing of people to carry out electrical work is unnecessary or the licensing of people to carry out fluid power work is necessary.** It is my opinion that the day will never come when the requirement for electricians to be licensed is removed from the Statutes of any Australian state and I think that it behoves the Western Australian government to strongly support The Society's proposal to bring about the required legislation in each state through Safe Work Australia.

The April meeting of The IFPSA's general committee approved that a letter of response be sent to the Western Australian government saying - amongst other things - that The Society will pursue the matter through Safe Work Australia, that The Society does not accept that licensing is required in the electrical industry but not in the fluid power industry and that The Society requests the strong support of the government of Western Australia.

### Test your knowledge

As the International Fluid Power Society has a number of certifications available, here are a few questions drawn from the entry level Industrial Hydraulic Mechanic (IHM) that is aimed at Mechanical Fitters, for you to ponder. Other levels of certification include:

- Fluid Power Connector & Conductor
- Hydraulic Certified Mechanic
- Pneumatic Certified Mechanic
- Hydraulic Certified Technician
- Pneumatic Certified Technician
- Hydraulic Certified Specialist
- Pneumatic Certified Specialist
- Fluid Power Electronic Controls
- Fluid Power System Designer
- Fluid Power Engineer

Local & onsite review training and testing is now offered through **Ian McDonald at Challenger Institute of Technology.**

The questions are:

#### 1) When adding new hydraulic fluid direct to a HPU from the drum:

- a) The oil should be filtered before adding it to the system
- b) The drum should be tilted at an angle to assist sediment separation
- c) The oil is ready for immediate adding to the system
- d) The oil should be analyzed before use

#### 2) A filter with the beta ratio of $\beta_5=100$ will remove:

- a) 100% of the particles
- b) 100 % of  $5\mu$  particles
- c) 1% of the particles
- d) 99% of  $5\mu$  particles

#### 3) When using high water content fluids (HWCF), the pump is best mounted below the tank due to:

- a) Reduced risk of cavitation
- b) Improved cooling of the pump
- c) Assisting evaporation
- d) Providing an improved fluid analysis test point

#### 4) A $\frac{1}{2}$ inch pipe thread may also be referred to as:

- a) Dash 12
- b) 12mm
- c) Dash 8
- d) 8mm

#### 5) If a pump produces 16 l/min at 2250 RPM, the pump displacement is closest to:

- a) 36cc/rev
- b) 7cc/rev
- c) 8cc/rev
- d) 71cc/rev

Answers:

1 a, 2 d, 3 a, 4 c, 5 b

## Vale

### John Rickards. 1927 to 2013.

John assisted Bill Hograth in the formation of the Fluid Power Society in Victoria in 1961 and served in many committee positions for over 30 years.

The *Fluid Power Company*, founded by John and the late Gerry Roberts in the mid 1950's was the initial distributor for *Norgren* in Australia until the *Fluid Power Company* was purchased by *Norgren Martonair*, UK in the late 1980's.

The product line represented by the company in the early days included, *Enotts, Hannifin* [before the *Parker* influence] *Bellows, Martonair, Gast, Simplex* and many other well known products in addition to *Norgren*.

One of John's greatest legacies to the Victorian branch of the Fluid Power Society is the annual Christmas function which he initially organised and that has been held in the rooms of the Hawthorn Football Social Club since 1964—John being member number 62 for most of his life. Rest in peace old friend.

**Jim Muir**

### IFPSA AGM Reminder

**The annual general meeting dinner of The IFPSA will be held at the Royal Perth Yacht Club in Western Australia on the evening of Friday August 16.** In addition to excellent food—at **ONLY \$30 pp** - and drinks that you will receive at the dinner at this magnificent venue, **a most interesting guest speaker** will tell us – and show us pictures - of her voyages and adventures on square-rigged sailing ships over the last twenty years. Put it on your calendar and make the booking as soon as you receive the emailed information about it!

..and in speaking of the AGM dinner, **we need one or two of the 'younger' people involved in fluid power in Western Australia offer their services to The Society by putting themselves up for election at the meeting.** The rewards are substantial as anyone who joins the general committee immediately has access to some hundreds of years of fluid power and managerial experience in their fellow committee members – free of charge!!