

The Life and Times of an Automation Professional—An Illustrated Guide

*by Ted Williams, Stan Weiner,
and Greg McMillan*



Copyright © 2006 ISA – The Instrumentation, Systems and
Automation Society
67 Alexander Drive
P.O. Box 12277
Research Triangle Park, NC 27709

All rights reserved.

Printed in the United States of America.
10 9 8 7 6 5 4 3 2

ISBN 1-55617-957-X

No part of this work may be reproduced, stored in a retrieval system,
or transmitted in any form or by any means, electronic, mechanical,
photocopying, recording or otherwise, without the prior written per-
mission of the publisher.

Library of Congress Cataloging-in-Publication Data in process

Notice

The information presented in this publication is for the general education of the reader. Because neither the author nor the publisher have any control over the use of the information by the reader, both the author and the publisher disclaim any and all liability of any kind arising out of such use. The reader is expected to exercise sound professional judgment in using any of the information presented in a particular application.

Additionally, neither the author nor the publisher have investigated or considered the affect of any patents on the ability of the reader to use any of the information in a particular application. The reader is responsible for reviewing any possible patents that may affect any particular use of the information presented.

Any references to commercial products in the work are cited as examples only. Neither the author nor the publisher endorse any referenced commercial product. Any trademarks or tradenames referenced belong to the respective owner of the mark or name. Neither the author nor the publisher make any representation regarding the availability of any referenced commercial product at any time. The manufacturer's instructions on use of any commercial product must be followed at all times, even if in conflict with the information in this publication.

Reviews

“The best thing about this book is that, if you can’t read, you still have a chance of not understanding what they are trying to say.”

~ TRUE MEANINGS FROM BEHIND...

“This book could not have been written/drawn 7000 years ago.”

~ The Society for Realizing How Far
Partial Differential Equations Has Taken Us

“Classic Stan and Greg” ~ Stan and Greg

“Ted, Greg, and Stan are entering a new dimension in their Quest for the True Meaning of Why We Automate.”

~ QTMWWA, September 2005 Edition,
QTMWWA@tedgregstan.org

“A must read for anyone who cherishes these adorable automators.”

~ AAA (Association for Adorable Automators)

“Industrial-strength cartoons at their finest.”

~ (IHOP) Industrial Honorary Ogling Professionals

“This book should not be read by people over the age of 75. I laughed so hard I fell out of my wheelchair and couldn’t get up.”

~ RAP (Retired Automation Professionals)

“The complete guide to the love and care of automation professionals.”

~ SPCA (Society for the Prevention of
Cruelty to Automators)

“Ted, Stan, and Greg deserve to be honorary Texans.”

~ TEJAS (Texas Exceptional Joint Automation Society)

“The mother of all automation cartoon books.”

~ MAD (Mothers of Automation Design)

“Autographed copies to your boss are a great ice breaker for performance reviews.”

~ DAP (Dapper Automation Professionals)

“Hoo woo, hoo haa.” ~ anonymous famous talk show host

In our hopes of being fair to everyone, we included this paragraph from The Society of Electrical Engineers that Became Options Traders:

“These lunatics will do almost anything to make you believe that controlling variables is more important than good food, sex, or money. They stay at work until all hours of the night in order to convince management that what they do results in more and better products. As anyone with a slightly improved financial knowledge can understand, it is the people in the trading pits that are causing the creation of wealth far in excess of what was deemed sufficient before the advent of the Distributed Control System. We will have more to say about this in future editions.”

Acknowledgment

Stan and Greg wish to acknowledge the many funny people that we have worked with in our careers. The conversations at lunch, on the baseball field, basketball court, and during trips were a trip. In particular, we thank John Berra (who left Monsanto to become president in a major automation company without a Muzak system), Bob Cameron (who went to seek his fortune in plastics), Jim Jordan (who left management to become the most insightfully funny president of an engineering firm), Glenn Mertz (who left process control to become a real-estate magnate), and Steve Sanders (who left Monsanto to become rich and famous in electrolyte modeling). Conversations after a few beers with Glenn Mertz were the source of the best top ten lists, and the startlingly unfiltered stream of consciousness from Steve Sanders made him the Robin Williams of Engineering Technology. We also wish to thank the contributors to our “Control Talk” columns and all the technicians, operators, and engineers who would talk to us and whose names we don’t remember, thanks to our advanced age. Stan feels that his greatest inspiration

came from the managers and vice presidents, who offered such timely and creative solutions to all the control problems.

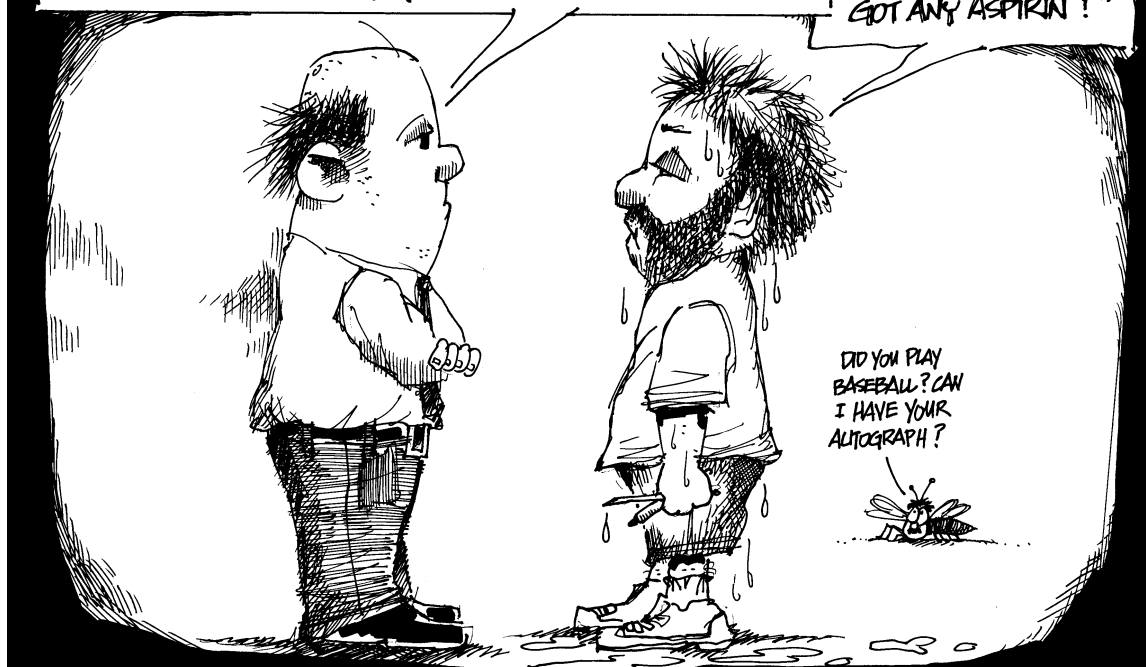
We also remember with a smile the fun times around the computer screens while camped out in control rooms with Bob Cameron, Henry Chien, Paul Luebbers, Gerald Mitchell, Bob Otto, Mark Sowell, and Terry Tolliver.

The ideas for these cartoons are the culmination of these experiences.



"SO... YOU'RE TED WILLIAMS...
I THOUGHT YOU WERE IN CRYOGENIC
STORAGE..."

"I WAS DEFROSTED
TO DO THIS BOOK...
GOT ANY ASPIRIN?"



DID YOU PLAY
BASEBALL? CAN
I HAVE YOUR
AUTOGRAPH?

Foreword

Stan and Greg first teamed up with Ted Williams for the ground-breaking book, *How to Become an Instrument Engineer – The Making of a Prima Donna*. Since then, Ted has illustrated numerous sequels plus our monthly “Control Talk” column. Twenty-years later, Ted’s cartoons are as fresh, timely, and entertaining as ever.

Stan and Greg spent a total of more than 50 years in the employment of Monsanto so, through association, many readers wonder if Ted Williams is the same person who helped pioneer advances in control theory during the 1960s and then moved on to head a special department and workshop on control at Purdue University and was elected into the “Control Hall of Fame” in 2004.

Others have speculated that Ted is the incredible Boston Red Sox hitter of the 1940s and 50s who is now in the Baseball Hall of Fame. Well, Ted the illustrator is not really related to any of these famous people, but he deserves to be in an industrial Cartoon Hall of Fame. Since we are pretty sure there isn’t such a thing, we

hereby create one and make *our* Ted the founding member.

To get your friends’ and neighbors’ attention and to promote the sale of this book, ask them if they have seen the latest from Ted Williams. Some ISA old timers may wonder if the Ted Williams of Purdue is getting out of his rocker in Indiana, but most will think you are off your rocker for proposing the possibility that a cryogenically stored Red Sox player is being thawed out.

The automation profession at times is strange and difficult to explain to people outside the field. You may also remember from our previous writings that it has been extremely difficult explaining it to our managers. It is one of the most misunderstood, yet fascinating jobs in industry. As a part-time professor teaching process control, Greg knows that students in the classroom have no concept of what it really means to be an automation engineer. Therefore, in order to prepare students for industry, we

suggest that this book be a required text for every course in control theory.

Automation engineers have some characteristics to match their interesting jobs. This cartoon book shows how you can spot these strange creatures at an early age. Since they are an endangered species, be careful in how you approach them and please don't mess with their habitat. The best place to find them is at ISA conferences where they can be lured for a closer look by offering new software, although the local draft beer has been reported to work as well. Outside of ISA and computer rooms, they are known to spend their time measuring and plotting the equilibrium temperature and declining level of a glass—once filled with ice and ethanol. In Naples, Florida, Stan has made technological advances in reducing the effects of humidity by using insulated glasses.

Back by popular demand are quotes from a control room deep in America's heartland courtesy of Pravin Patel and Kevin Witter. These "strange but true" quotes of operators from the Muscatine plant that first appeared in the book *Dispersing Heat Through Conviction* have been appreciated by people from all walks (and jogs) of life.

The next time friends and relatives ask "what do you do," give them a copy. If the smiles develop into uncontrollable laughter, use your automation skills to prevent injuries from side-splitting humor and, as a last resort, force the reading of standards as an effective antidote.

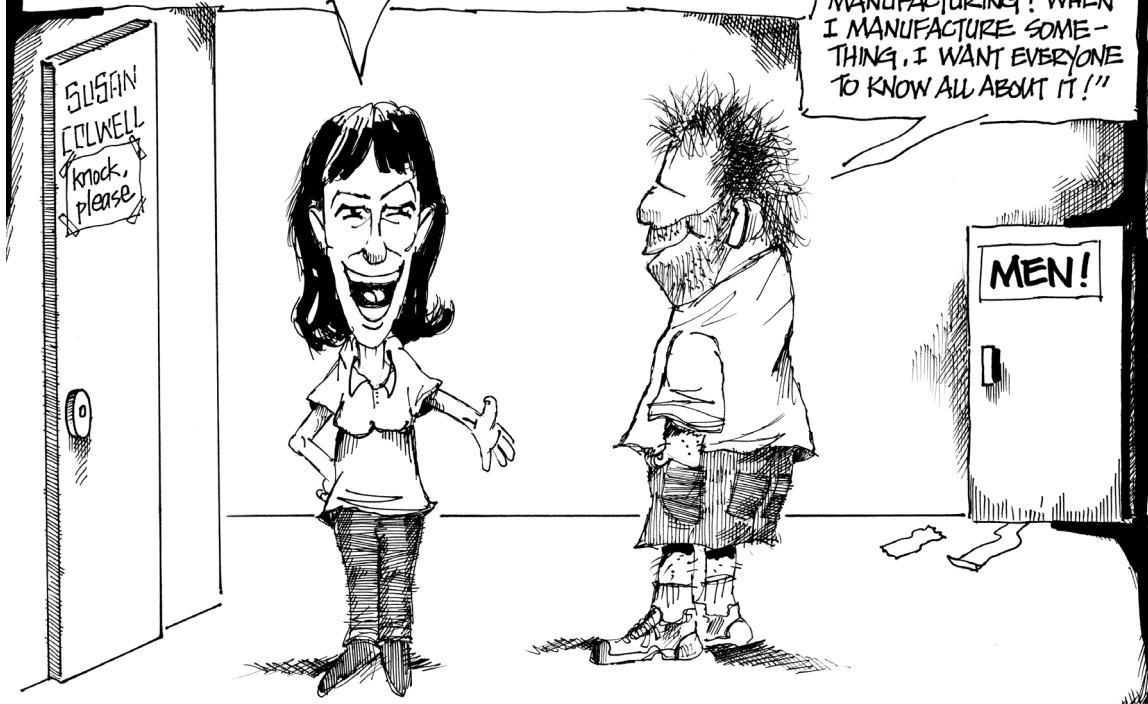
To help preserve and promote this valuable profession, Greg promises to donate every dollar of royalty that he gets from this book to the profession. At the suspected rate of a quarter per copy, he should have enough to buy a refurbished laptop in 10 years, assuming that the price comes down.

As a Supervisor of the Collier County Soil & Water District in Southwest Florida, Stan will use his share of the royalties to supplement the \$9,000,000,000.00 that has been pledged by our governments to restore the Everglades.

A picture is worth a thousand words or, in the case of Stan and Greg, at least two thousand words. This is our chance to sit back and let the cartoons speak for themselves. Enjoy.

"TED... WE NEED CARTOONS
ABOUT DISCRETE MANUFACTURING!"

"WHAT IS DISCRETE
MANUFACTURING? WHEN
I MANUFACTURE SOME-
THING, I WANT EVERYONE
TO KNOW ALL ABOUT IT!"



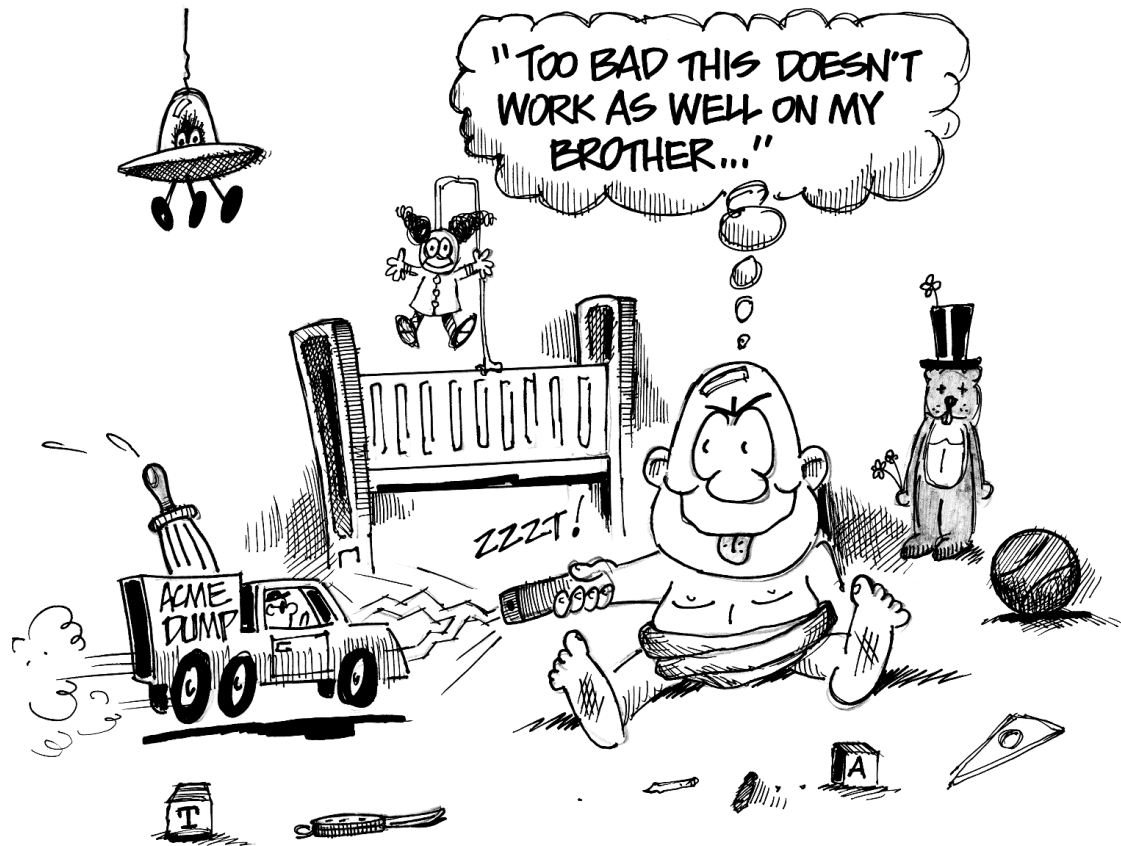


From the control room...

“My goats had a set of triplets and a set of doublets.” – Wayne

“Is that the tree legged kid?” – Dirck



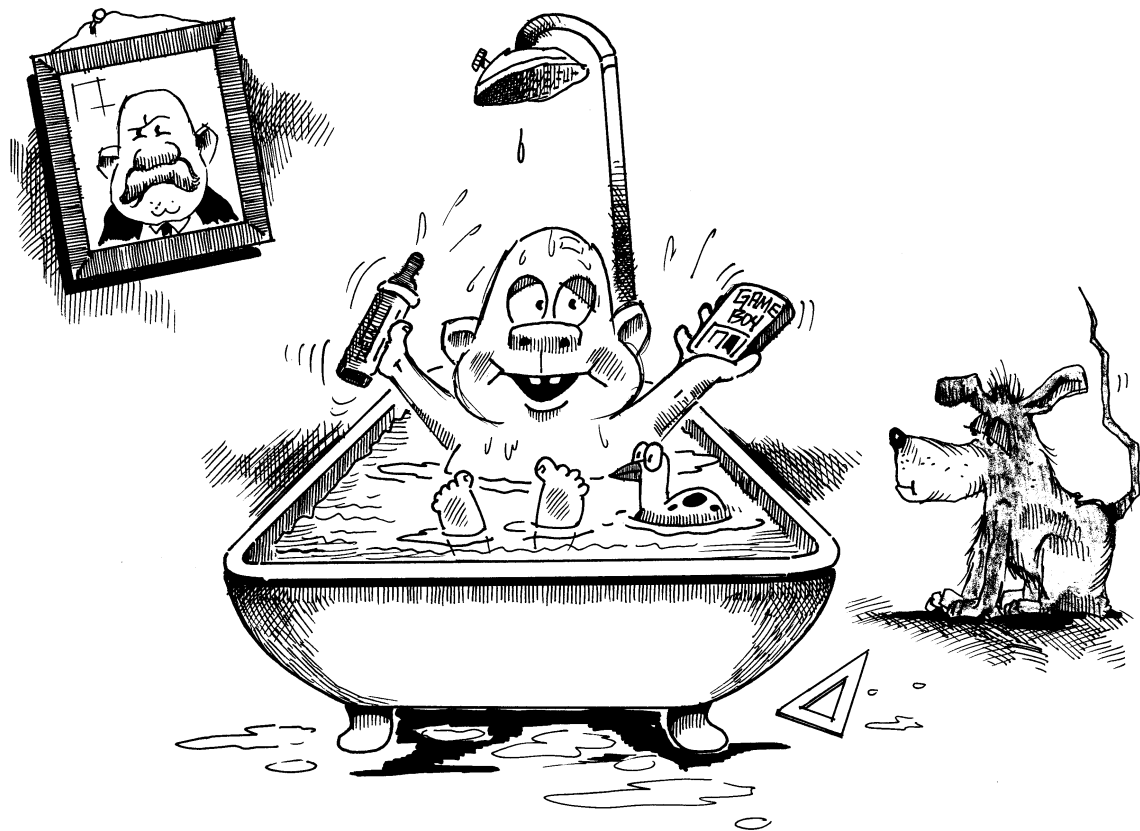


From the control room...

“Hambone, you are going to be buying diapers and formalin.” – Uzi

“Little girls are supposed to be little.” – Dub





From the control room...

"I am a bronze goddess." – Jason

"I'm at my ends wit." – Brian M.



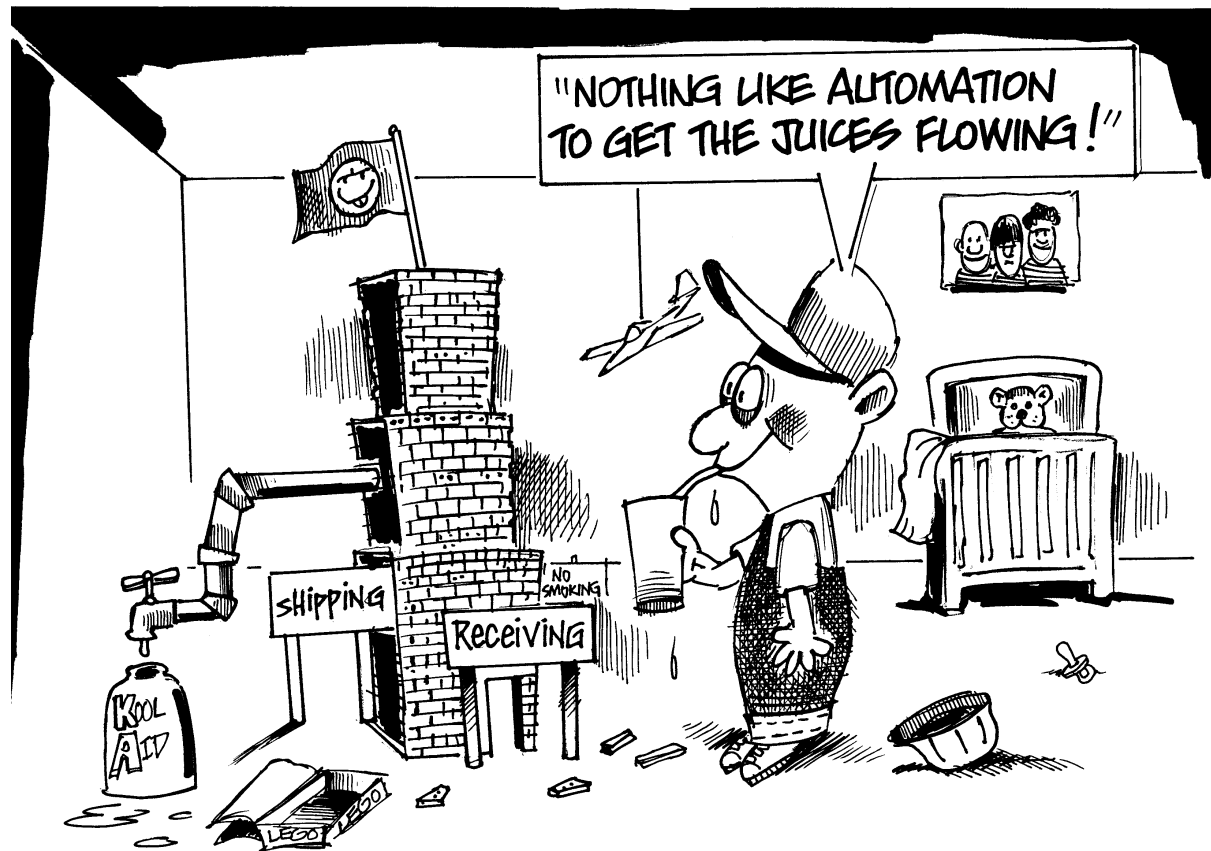


From the control room...

“This procedure reads like stereo instructions.” – Mike, after going over a new ACE document

“What’s the difference between CDs and BVDs?” – Dub



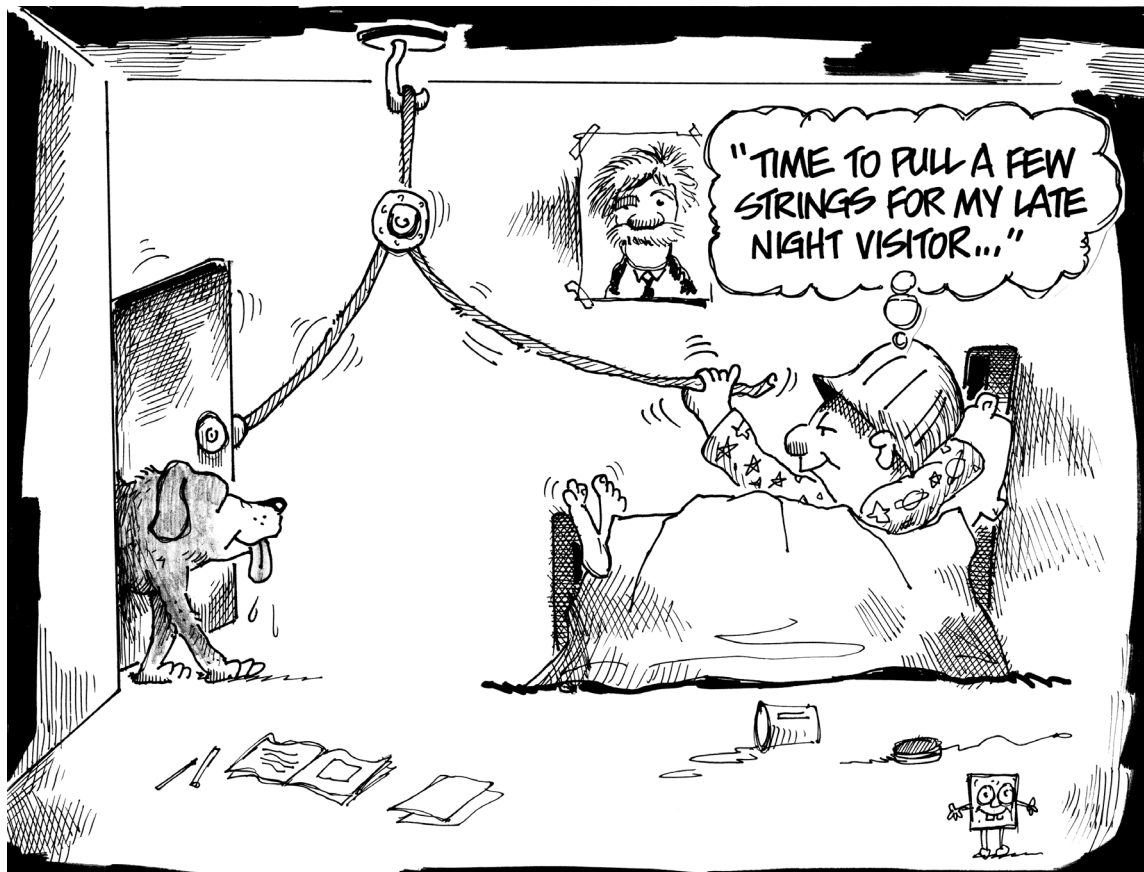


From the control room...

“Do you do this to everyone, or do you do it to other people too?” – Brooke

“You will be someone we read about on TV.” – Hambone



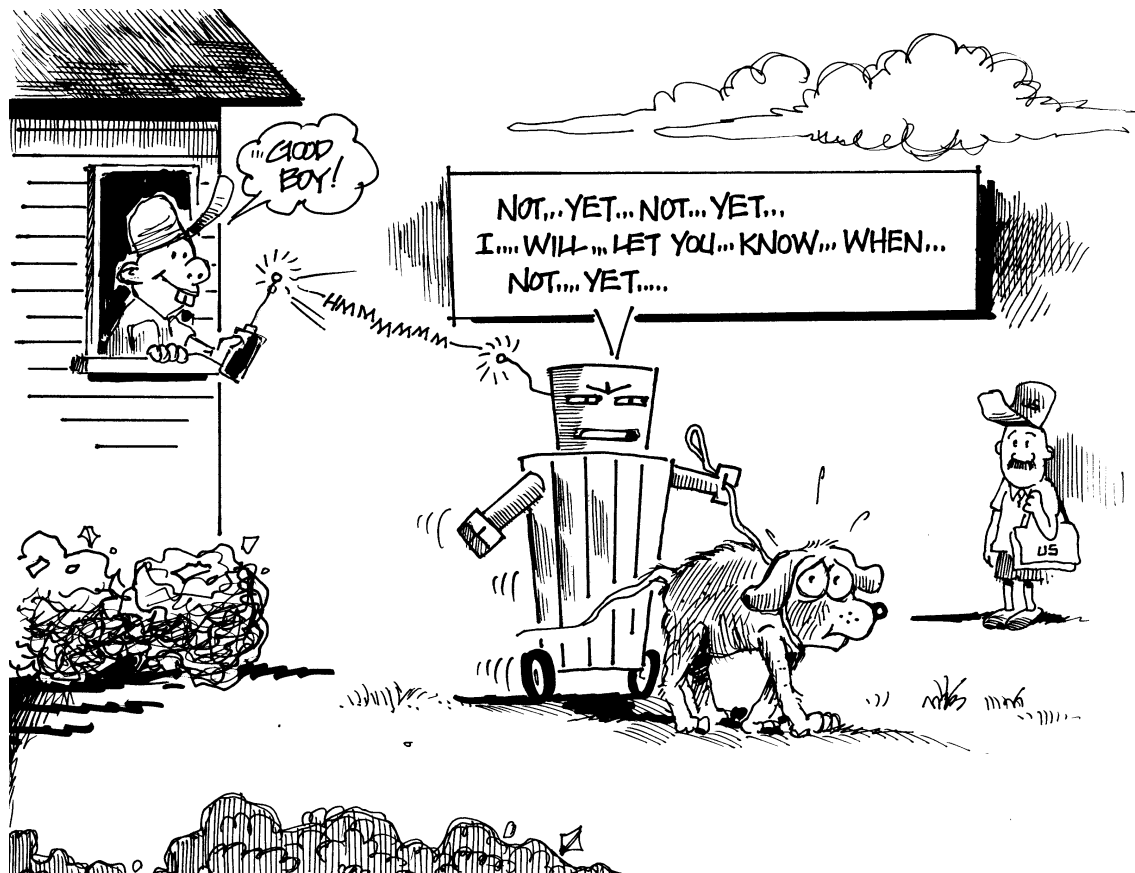


From the control room...

“They got a Wisconsin boy out of Wisconsin.” – Ward

“... the right wrench for the tool.” – Kevin C.



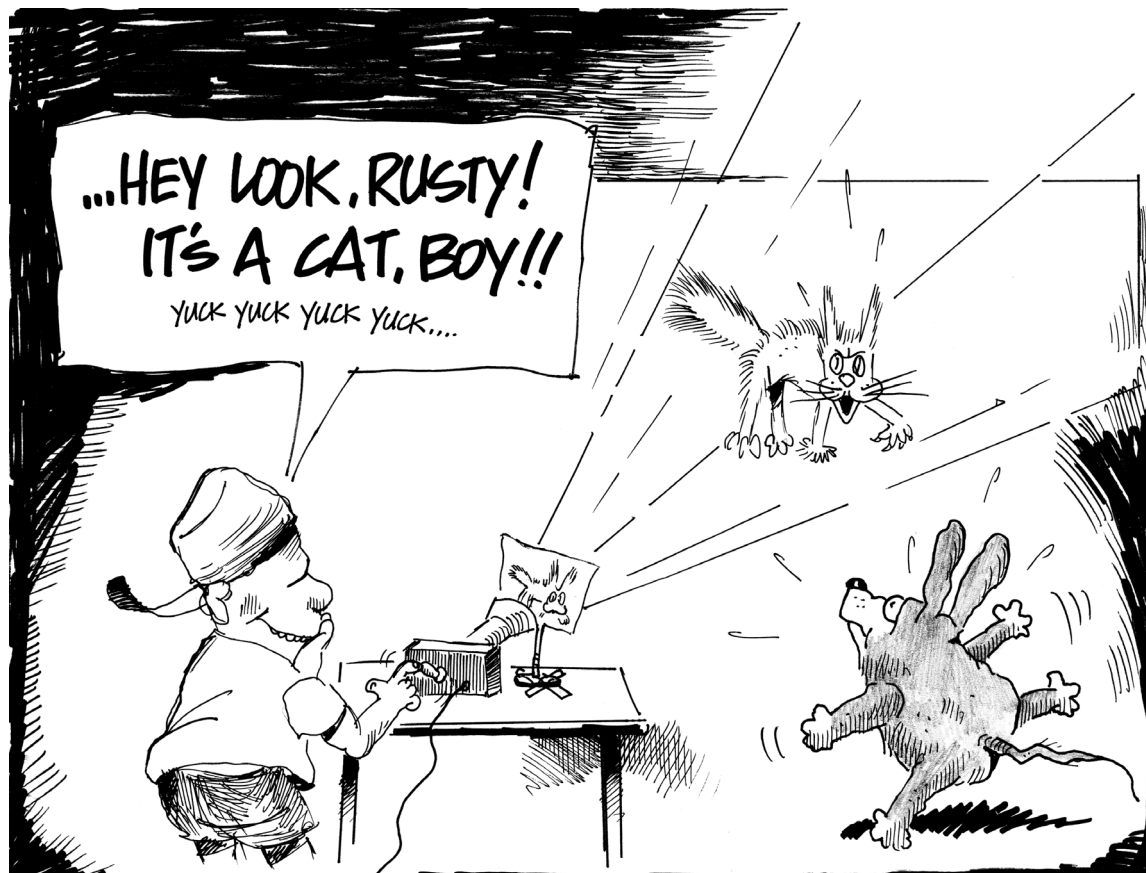


From the control room...

“It could be a sheep in skins clothing.” – Dodie

“Do you use a dead rabbit call for those coyotes?” – Ward





From the control room...

“Who is Halliburton? Is that a fish?” – Thad

“Harkin is in Washington D.C. fifty out of fifty two months a year.” – Bill Y.





From the control room...

“My sister is a mailman.” – Janet

“All the safety showers out there have water in them.” – Brian F.





From the control room...

“Around here you have to act like you like people.” – Thad

“It’s hard to tell what a valve is unless you know what it is.” – Dodie



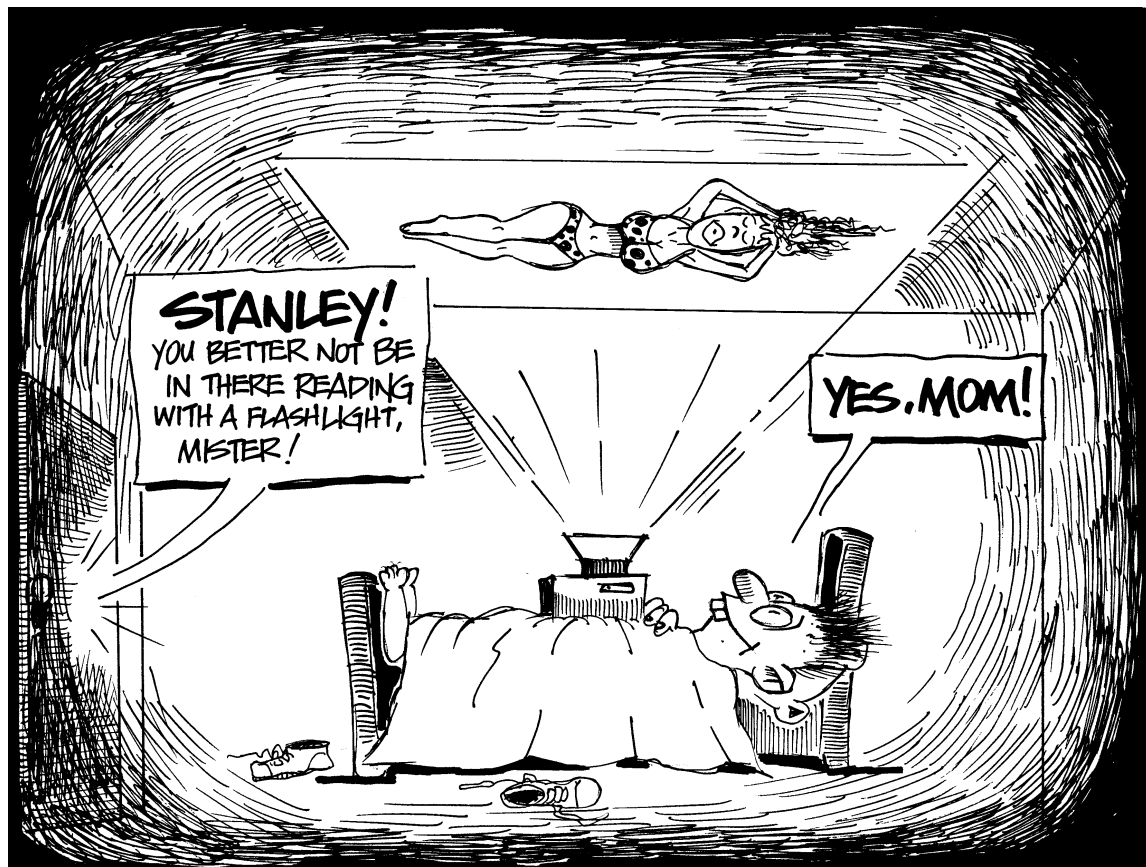


From the control room...

“Some people sleep with their eyes closed.” – Dodie

“45 minutes is way too much time with myself.” – Mike M.



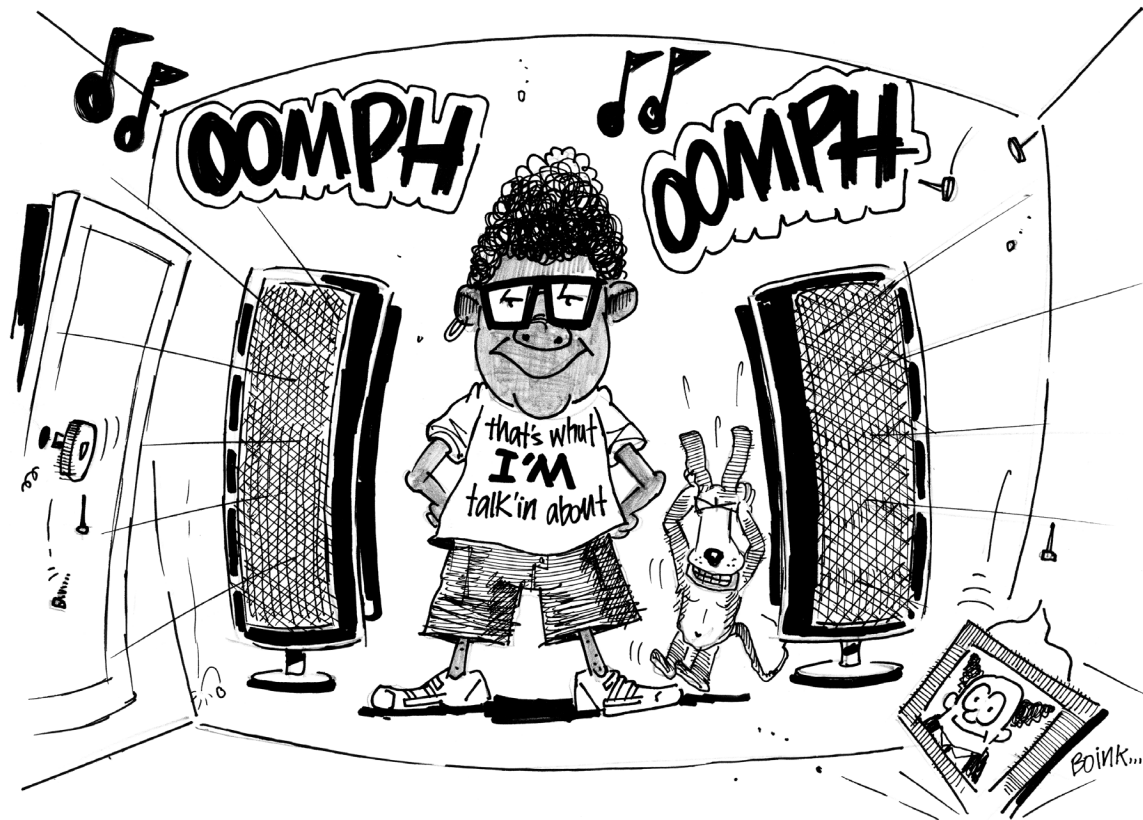


From the control room...

“I am somebody. Up til now I wasn’t sure.” – Jim

“I’m the Drew Carey of the A-Unit.” – Ryan



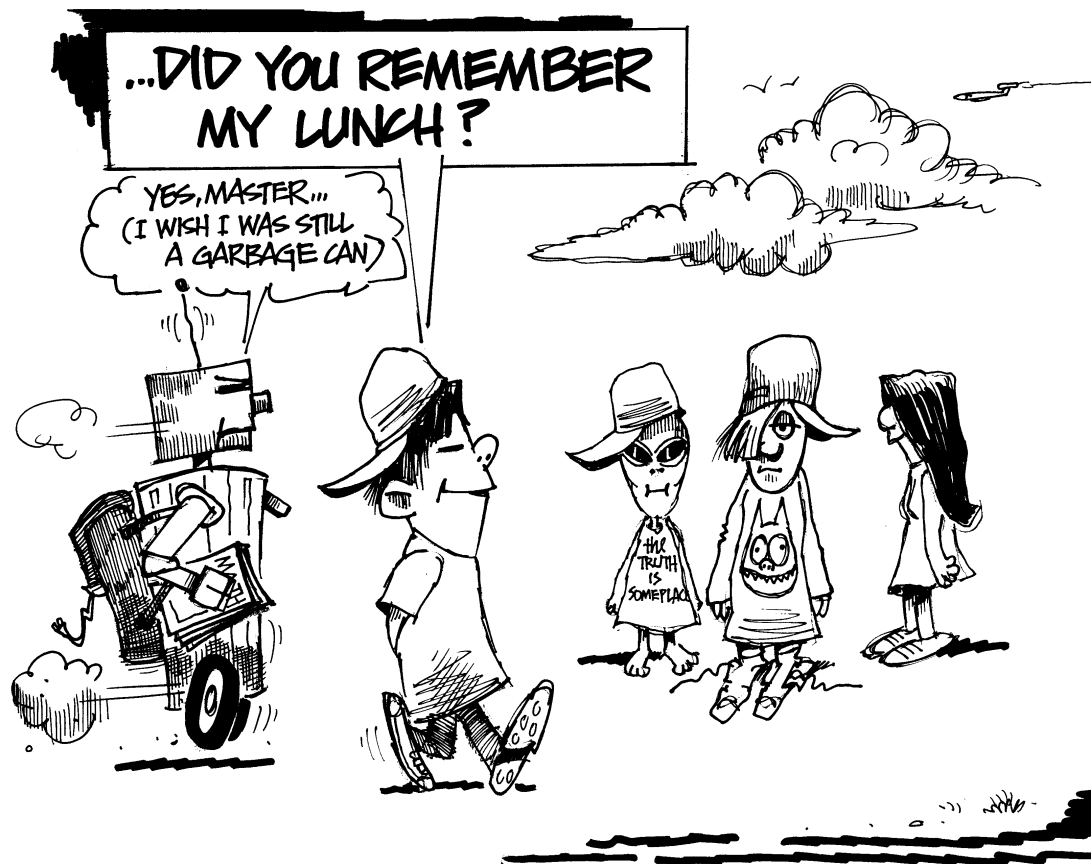


From the control room...

“I was never there and I was never caught.” – Radar

“Robbie can’t even bread his toast.” – Quinton





From the control room...

“Lance Armstrong was the first guy to walk on the moon.” – Dub

“How did the Pentagon get its name?” – Jim



...O.K. WALTER... WHO
WON WORLD WAR II ?

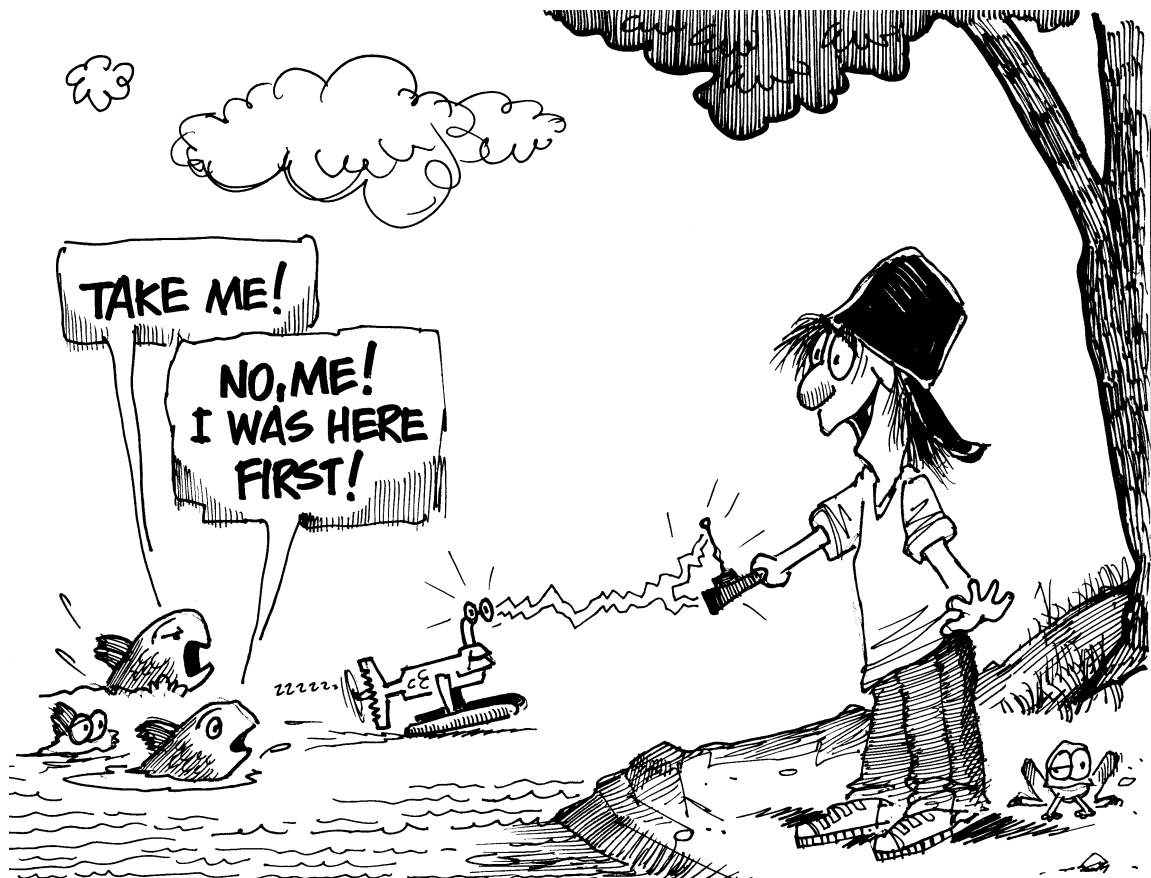


From the control room...

“If you get stung by a jellybean you have to pee on it.” – Dodie

“It had two hide-a-couches and a tropicalgraphical map of the lake.” – Purdy



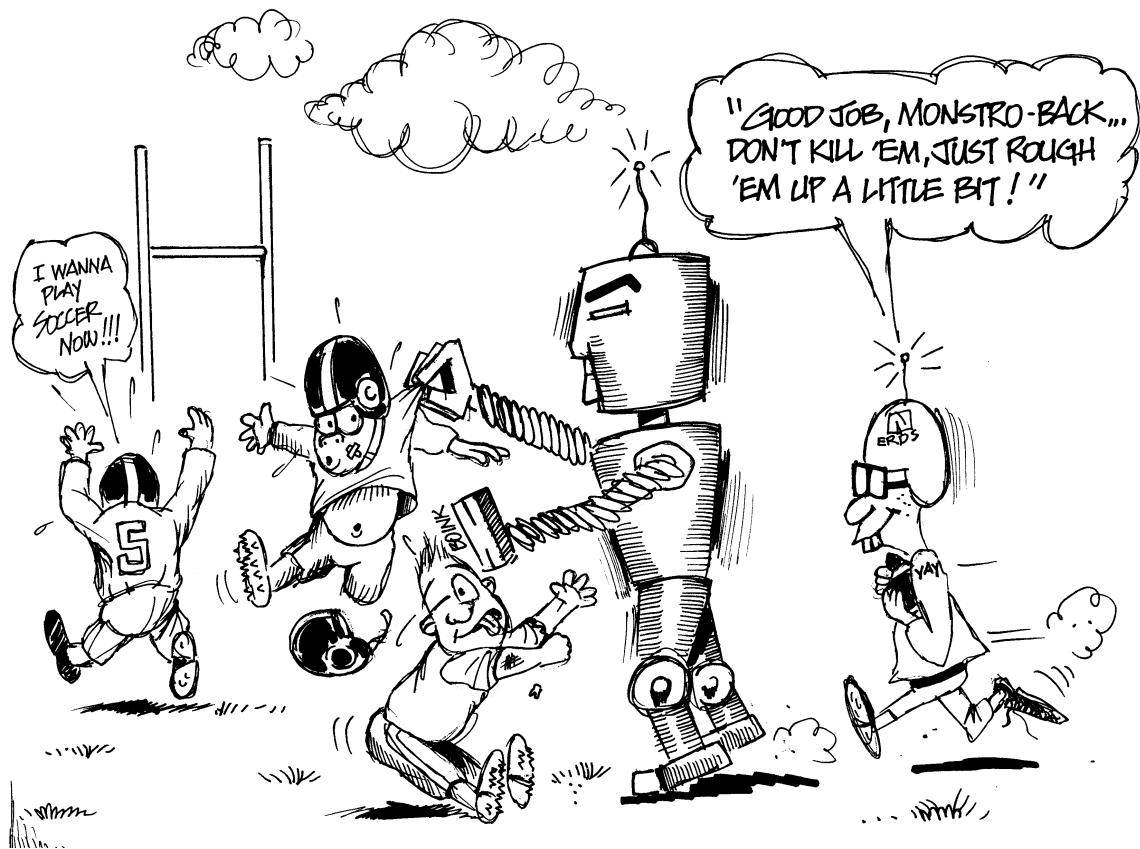


From the control room...

“Kevin was squealing like a chicken.” – Brad

“Now that I’m action area leaded, you guys can’t blow me off!” – Ryan



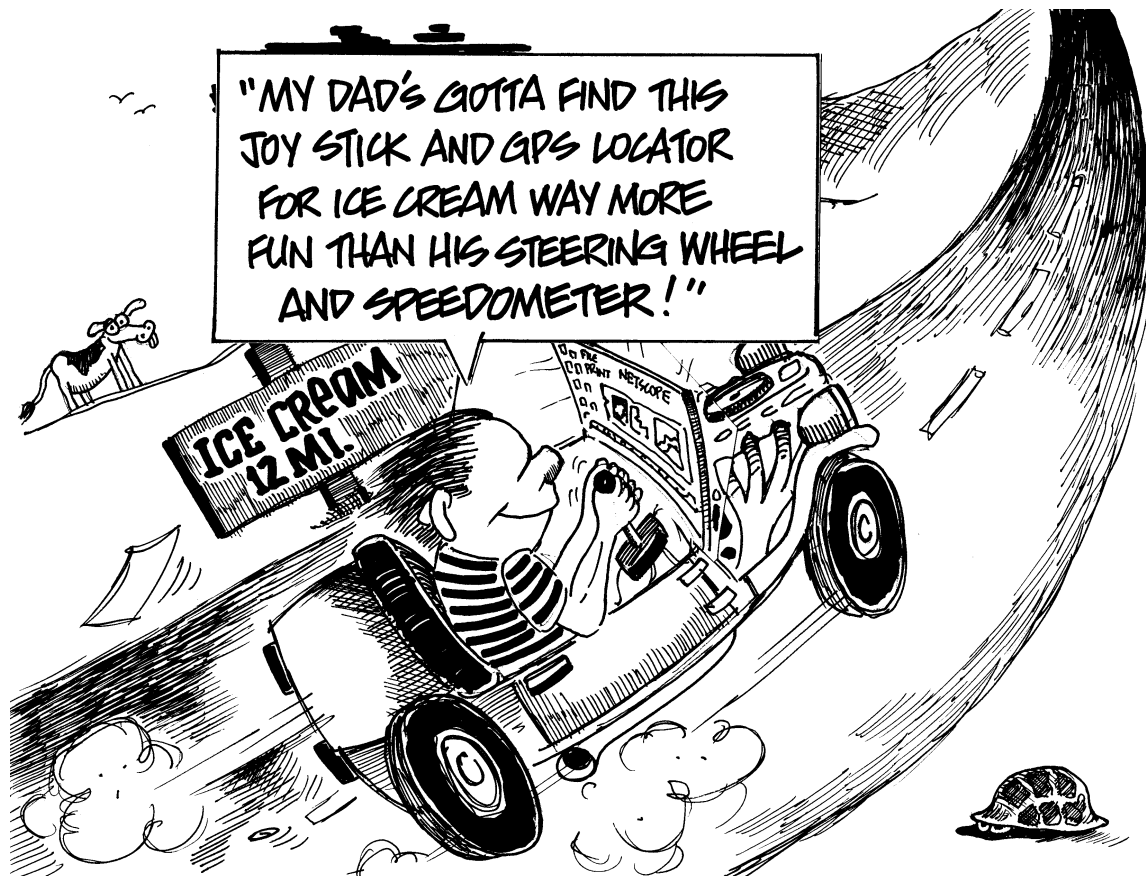


From the control room...

“I don’t get gas. My body absorbs it.” – Sam

“On the weekends, there are 15 cars in the parking lot. You can count them on one hand.” – Brian





From the control room...

“The turkey fur was flying!” – Kevin H.

“What size feet do you wear?” – Bodene



RRAARRW!!!

FUNNY... THIS HOLOGRAM
EVEN SMELLS LIKE A
REAL BEAR...

...DUDE, WHAT HOLOGRAM?
THAT'S MY NITE-LITE!



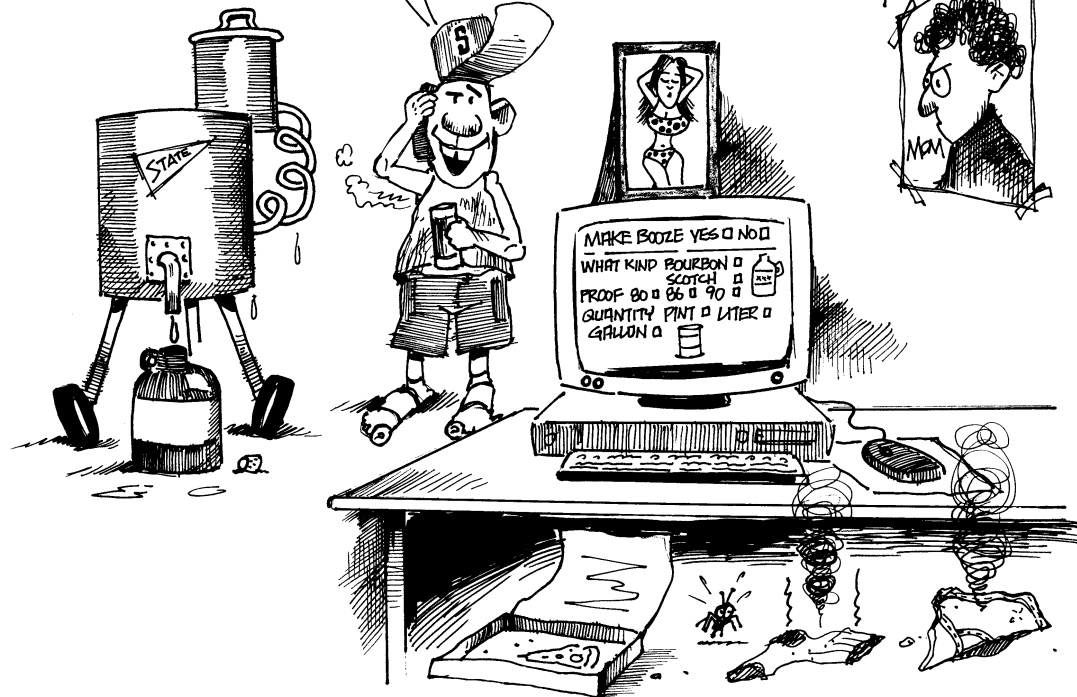
From the control room...

“He’s not the sharpest bulb in the package.” – Brian F.

“Do you guys want cheese on your cheeseburgers?” – Robbie



"I'M DOWNLOADING A GALLON!
...BRING THE GIRLS... AND SOME DEODORANT !!!"



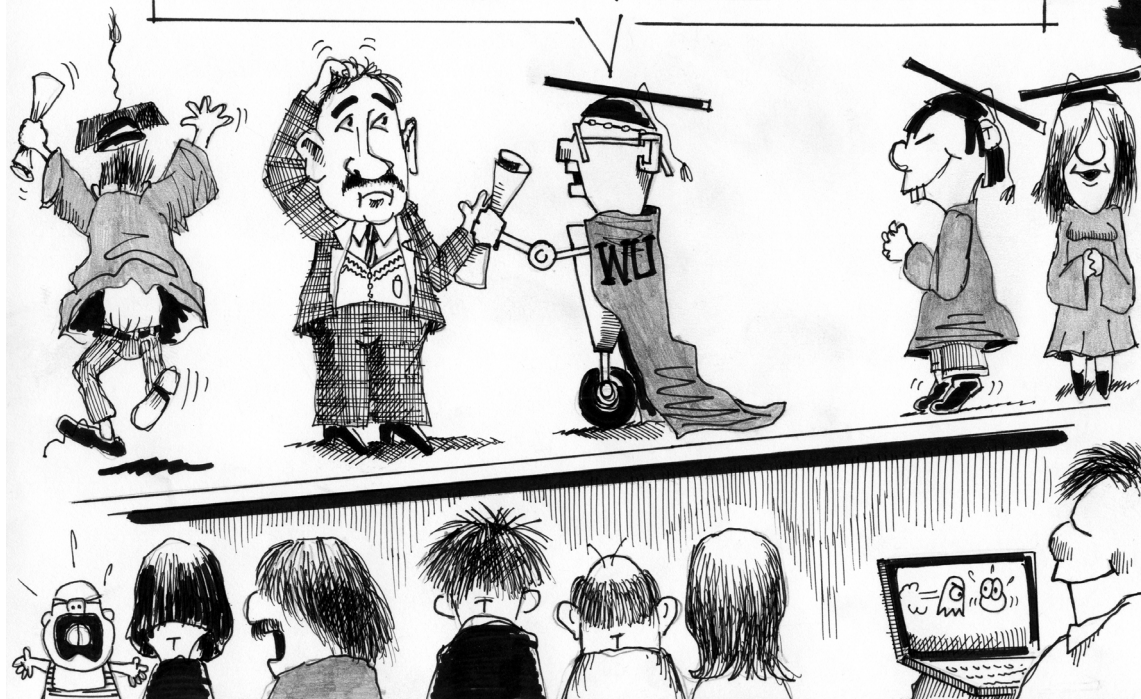
From the control room...

“From now on I’m going to have to be clerically correct.” – Dirck

“I won’t do that again twice!” – Dodie



"THANK YOU... DEAN... ON BEHALF... OF "STEWIE" MORGANKOWSKI...
WHO... WAS UNAVOIDABLY DETAINED... I PROUDLY ACCEPT HIS...
FREE GAME... I... MEAN... HIS... DIPLOMA!"



From the control room...

“She’s kinda from Missouri.” – Sam

“You know, no matter what you say, men and women are different.” – Dodie





From the control room...

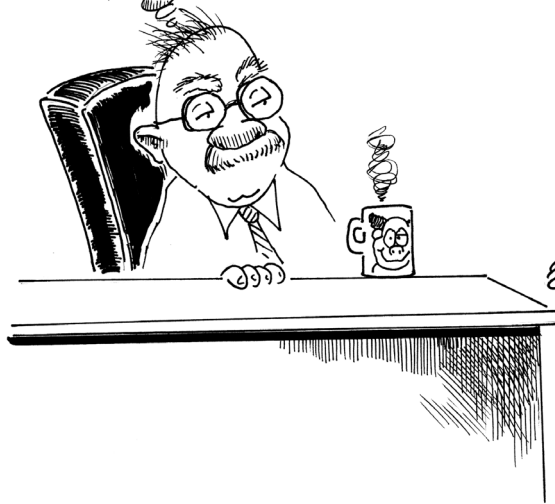
“I don’t say stupid things, do I?” – Janet

“Either you are saying something about me or you are talking about me.” – Purdy



"WHAT IS A D/P CELL? IS IT SOME
KIND OF A GENETIC CONTROL SYSTEM?"

PERHAPS IT MEANS
"DUMB PERSON?"

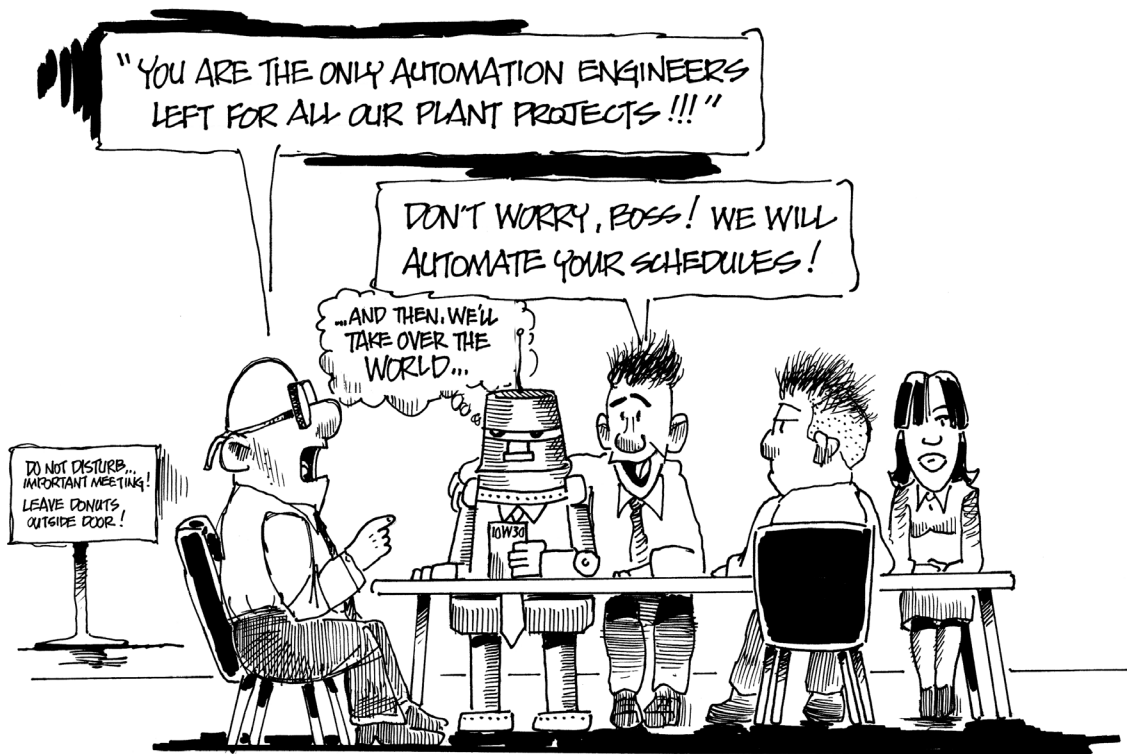


From the control room...

“We need to keep our minds to the grind stone.” – Thad

“I’ve had the training. I am CRP certified.” – Dub





From the control room...

Dub – “I’ve got to get my taxes done before my tax man leaves the country.”

Thad – “Where is he going?”

Dub – “Colorado.”



"...EXCUSE ME, FELLAS... WHERE
ARE THE BODE PLOTS AND LAPLACE
TRANSFORMS FOR EACH LOOP?"

"TO HUMANS... ALWAYS...
BEHAVE... THIS... WAY?"

PLEASE!
NO... NO MORE!

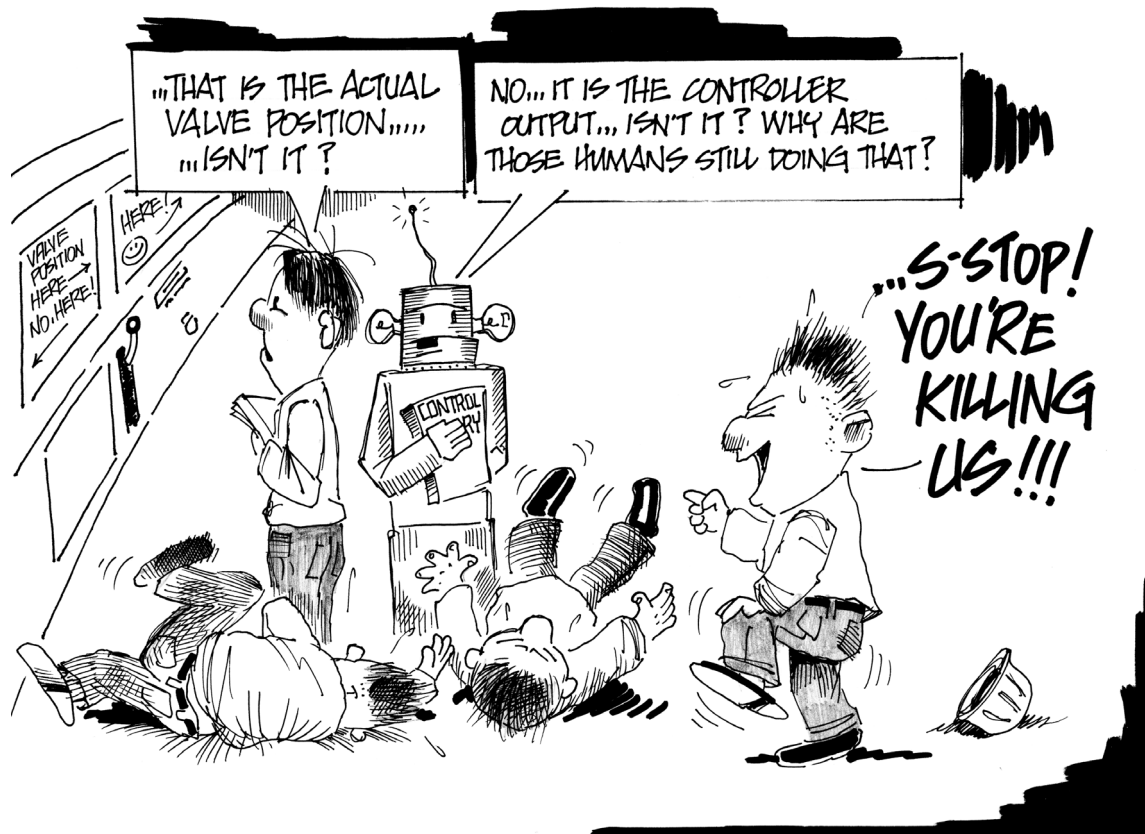


From the control room...

Don – “Did you just get here Matt?”

Matt – “Do you mean today or right now today?”





From the control room...

“It’s just money.” – Thad

“A day here, a day there, that’s 3 days vacation.” – Uzi





From the control room...

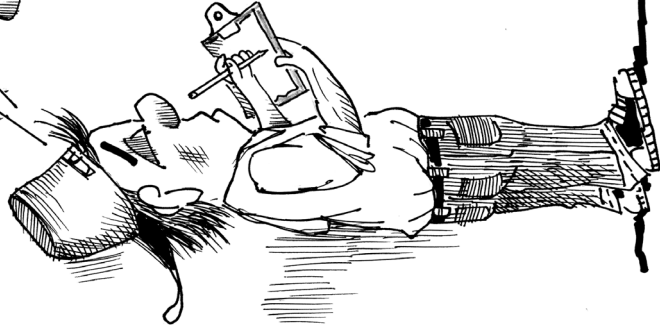
“I got it wrong because I didn’t circle the right answers.” – Robbie

“There are some ripples in the waves.” – Sonny



"MAYBE STRING HAS SOME
DRAWBACKS AS THE UNIFIED
FIELD THEORY..."

I HAVE TO BE MORE CAREFUL
ABOUT WHO I "HELP" GET OUT OF
GRAD SCHOOL...



MAGILLIARDI
~AND SONS~
STRING INC.

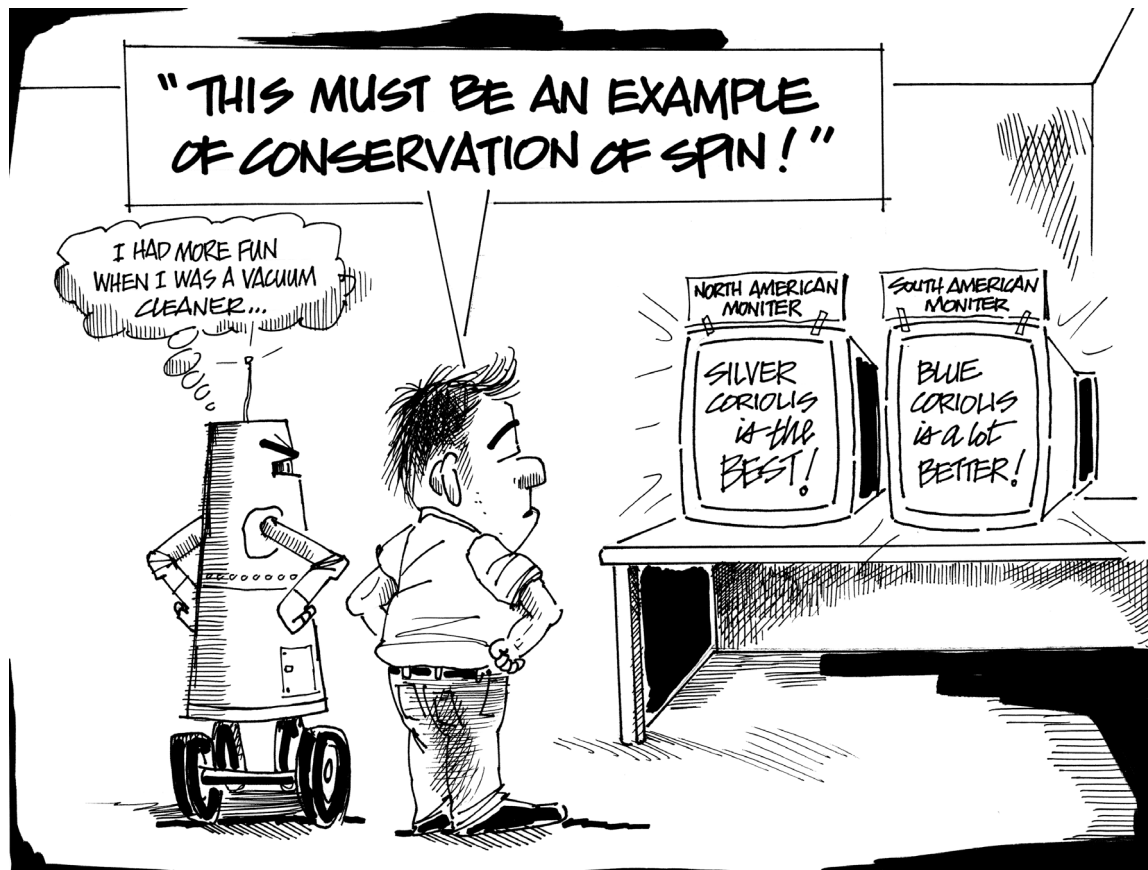


From the control room...

“Two percent of 100 is a lot more than two percent of 15.” – Dirck

“How much does 600 pounds of ammonia weigh?” – Scrap Iron



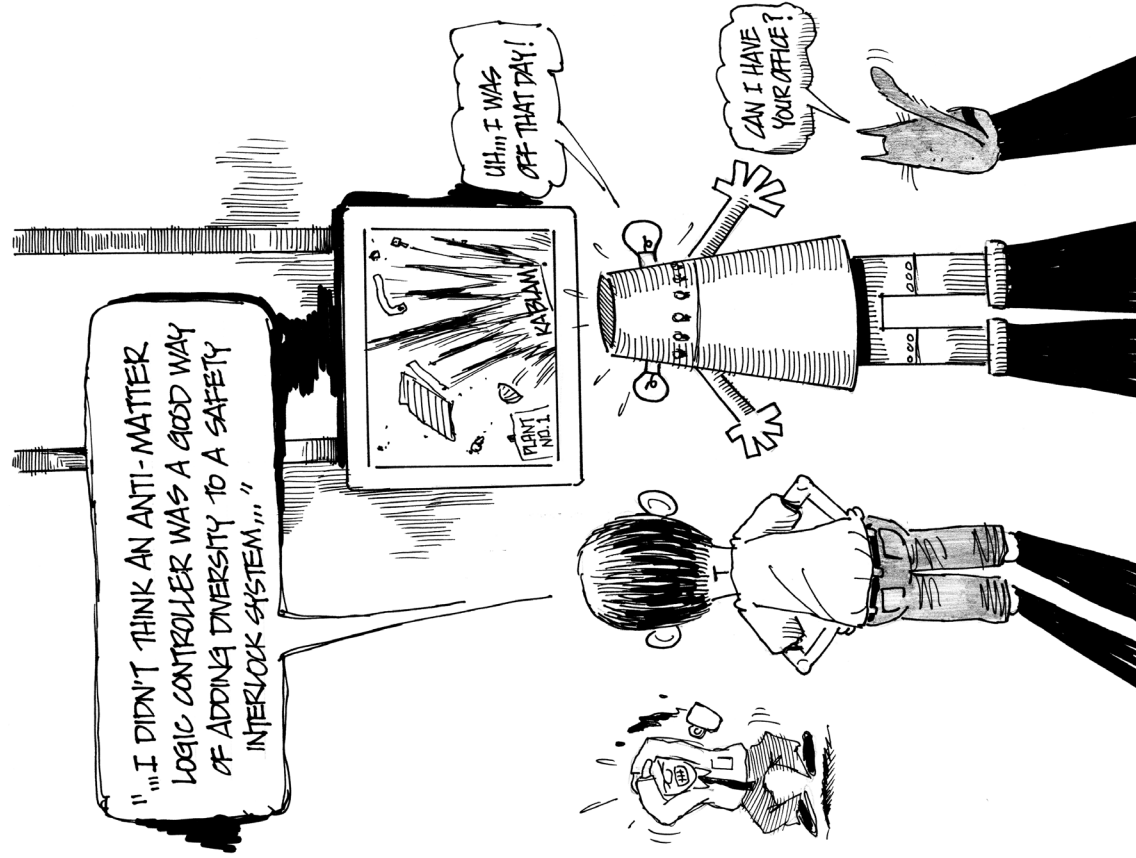


From the control room...

John – “I think it’s a lack of good genes.”

Dodie – “I buy the expensive ones.”



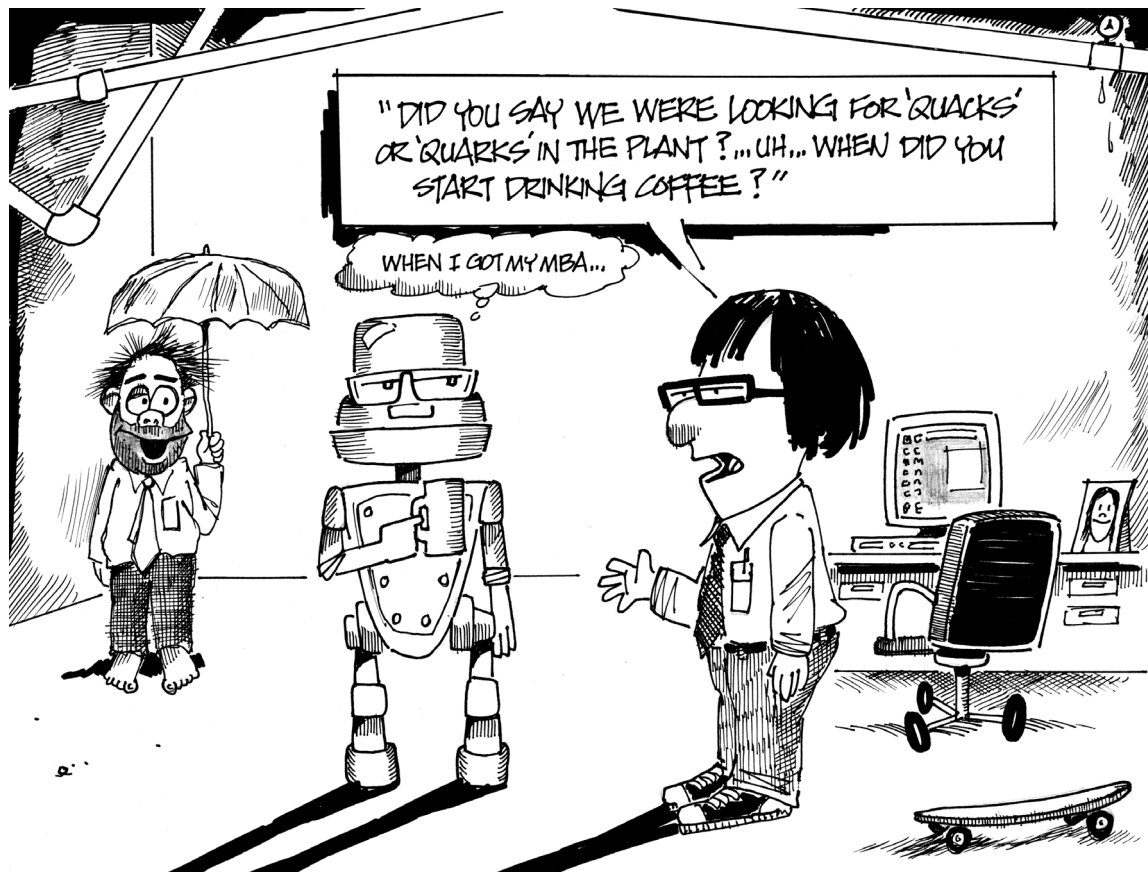


From the control room...

“I’ve got a different way of versing the American language.” – Dirck

“I got in trouble for not dotting my tee’s and crossing my I’s.” – Lucas



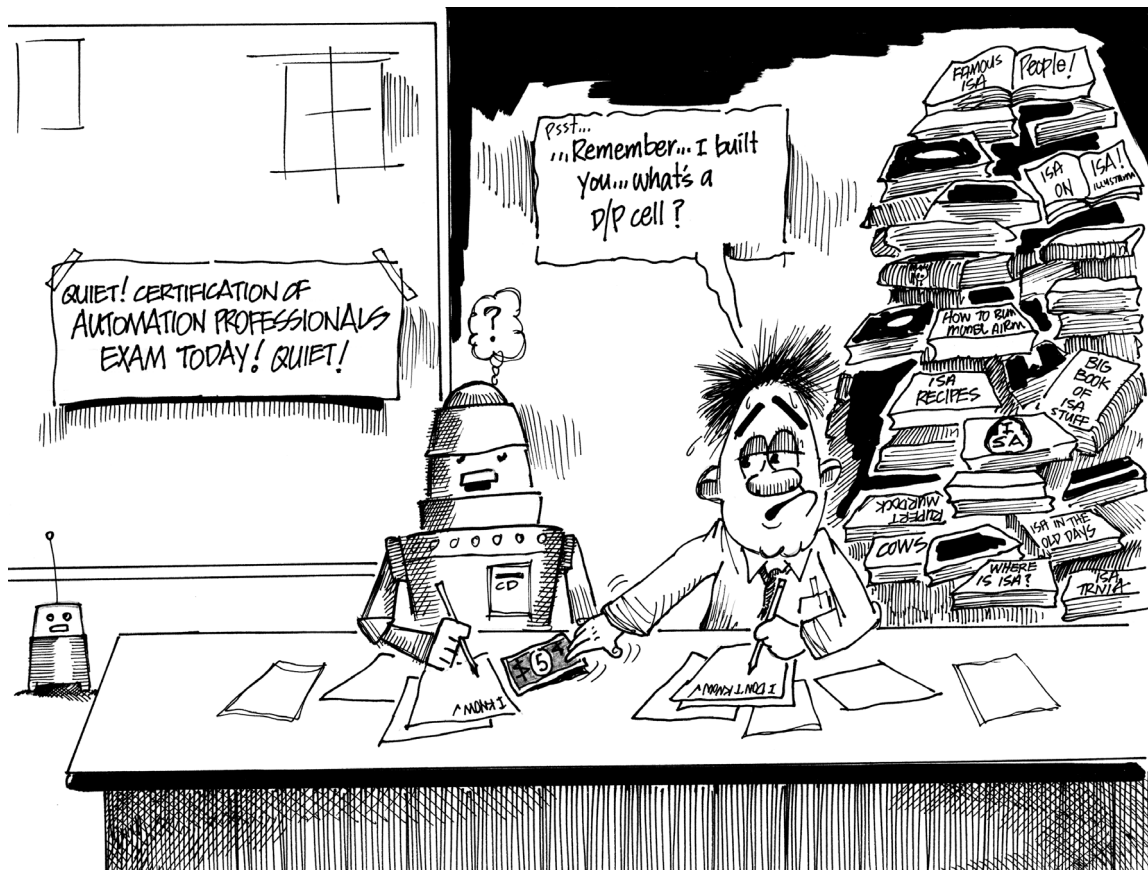


From the control room...

“I was just thinking to myself, out loud.” – Ward

“These are only going to be one answer words.” – Dirck



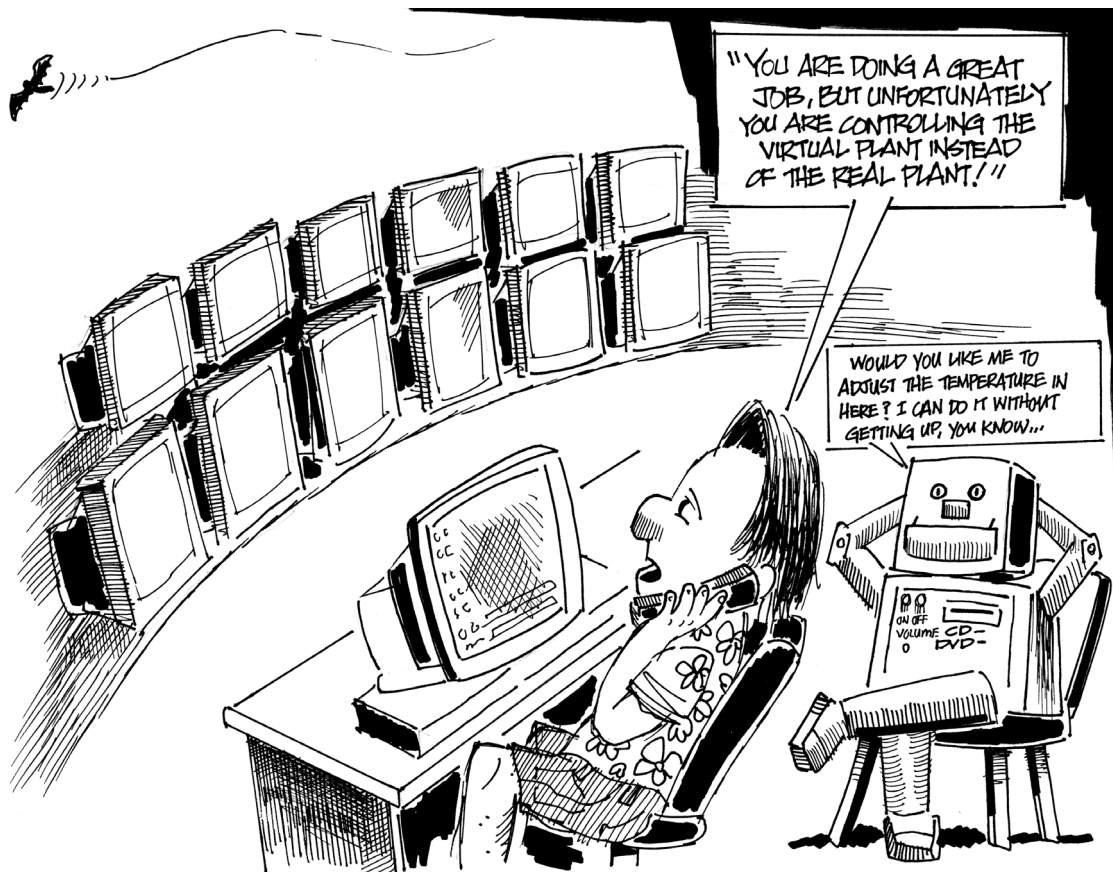


From the control room...

“This is not user easy.” – Sam

“Give it a second. It might take a few minutes.” – Dodie





From the control room...

“Getting into that Escort Wagon was like getting into a Vette.” – Cole

“I don’t want a Corvette. I want a Lambordini.” – Dub



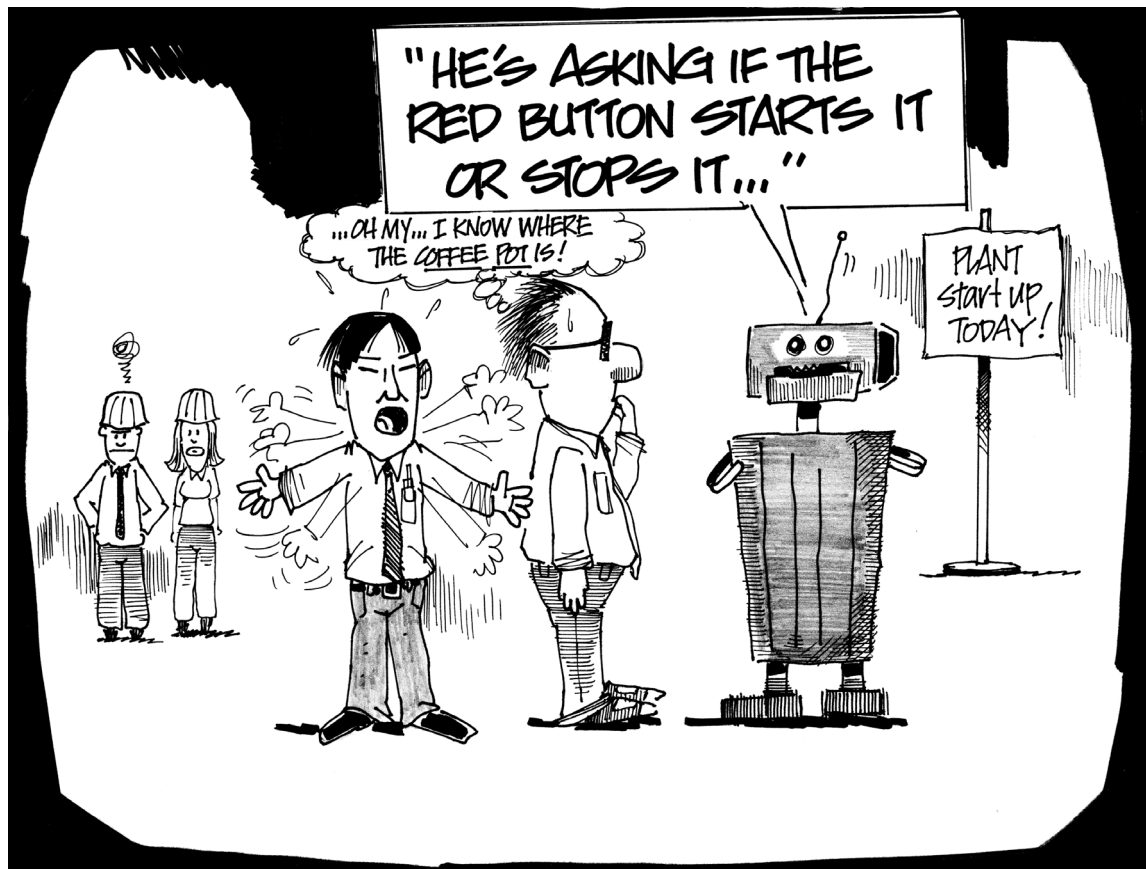


From the control room...

“What time is our 2 o’clock meeting?” – Mike S.

“The agitator is wired backwards so we are unstirring instead of stirring.” – Dub





From the control room...

“They’re going to pay 3 digit money, like \$100,000 a year.” – Janet

“You’ll get an incentive for eight twelfths or three quarters of the year.” – Steve A.



Country A

Country B



From the control room...

Quinton – “I was outside helping Dave when a bird crapped on me.”

Bodene – “Dave Crull?”

Quinton – “No, the bird.”





From the control room...

“It’s like when you are trying to find your Minerva.” – Cole, meaning Nirvana

“Is Apocalypse the three headed lady?” – Quinton



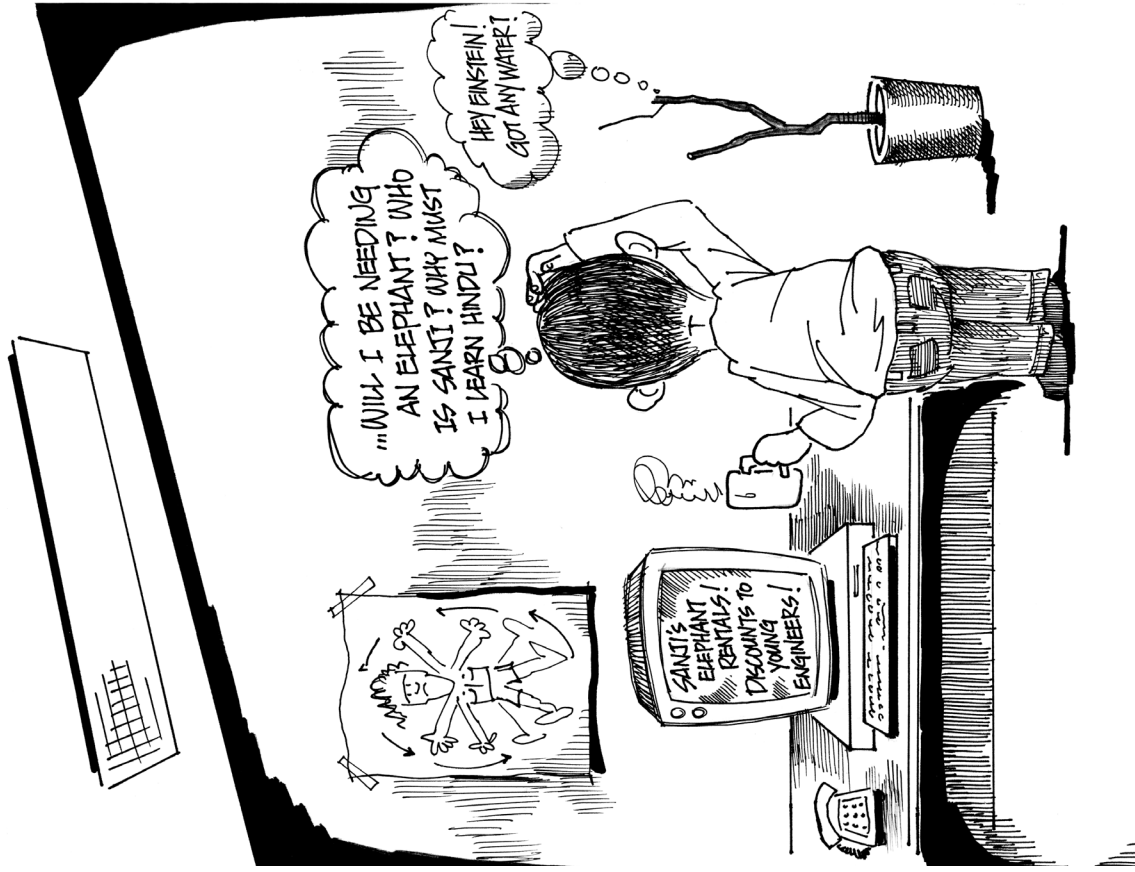


From the control room...

“The squeaky gets the worm.” – Keith

“He looked like the bird that swallowed the canary.” – Jay



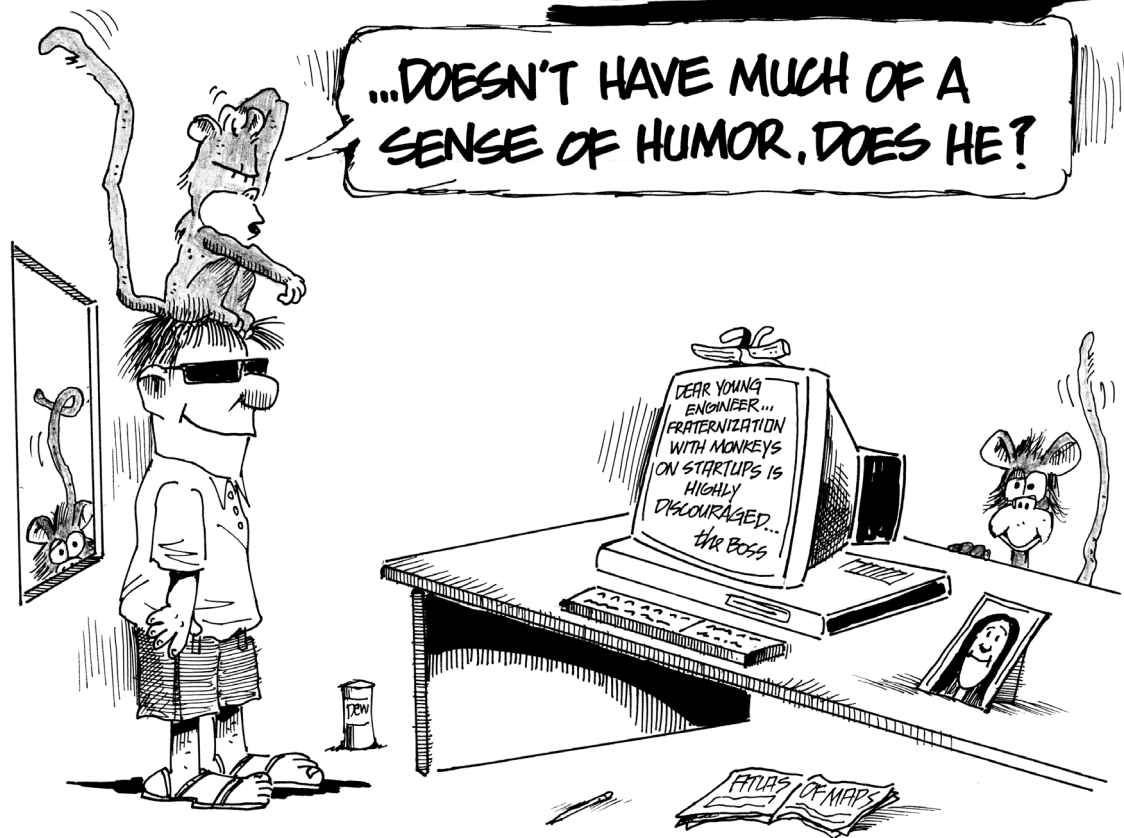


From the control room...

Don – “You’re 5’ 11” aren’t you?”

Robbie – “No, I’m 5’ 12”.”





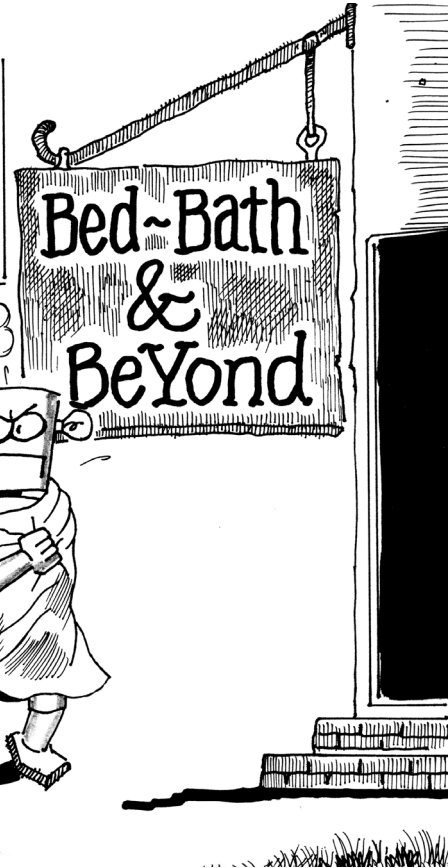
From the control room...

“Somebody’s got to be the center of attraction.” – Radar

“They will never goat me into doing that.” – Purdy



"MAYBE THIS WILL MAKE
US LESS CONSPICUOUS FOR
OUR NEXT START-UP!"

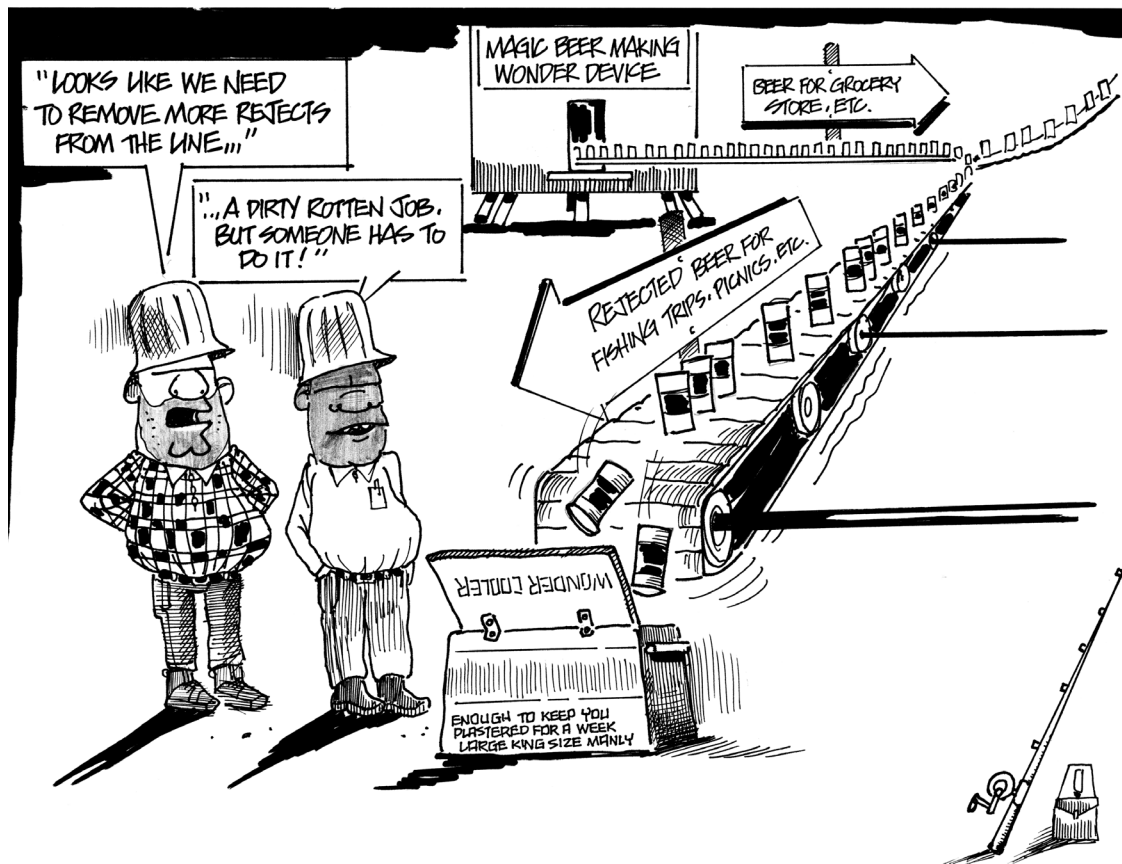


From the control room...

“They keep 80 percent of the product and give the other 30 percent away.” – Kevin H.

“This place only runs 6 months out of the month.” – Thad





From the control room...

Kevin H. – “What’s Jerry’s last name?”

Quinton – “Jerry who?”

