Inventors' Network volume 9

Of the Capital Area [INCA] Issue 2

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For FEBRUARY, Mr JOEL PRICE returns to share the second half of his lessons about Development.

In December, Joel shared his experienced wisdom on how to minimize new-product risks through Feasibility Management tools:

- 1. Confirm viable penetration level of large target-market.
- 2. Link with pre-established means of distribution.
- 3. Organize with sound financial means.
- 4. Commitment of an experienced, responsible product champion.
- 5. Insure consumer satisfaction from distinct advantages of product.

MEETING: 3rd Monday,

19 Feb.

5:30 Network w Pizza

6:30 Joel Price

SIX STEPS of Product Development

7:30 Member Issues Candidate Nominations for Officers & Directors

Membership Suggestions for 2001 Program Content

For concepts that pass the feasibility criteria, a product development will tend to pass through six common steps:

- 1. Concept will be shaped and defined into a family of products.
- 2. Design team will analyze, configure and "design-to-a-cost" to meet business and marketing criteria.
- 3. Prototypes will be specified and shaped to test actual performance and customer acceptance.
- 4. A patent strategy will formed and executed to meet National and International law & market objectives.
- 5. Production processes and resources will be analyzed, funded, tested and continually evaluated.
- 6. Marketing will be integrated with other 5 steps, and metered to match a flexible budget for sales-growth vs resource demands.

As a product-concept is guided through a decision-management process, stake-holders for each of the tools and steps are faced with determining the levels for their investment of time, money and talent, and for determining their own expectations of how well each step is defined and executed.

[Differences in judgement among stake-holders reflects a need to maintain an on-going, equitable "exit strategy" and to demand objective traceability for professional contributions.]

Joel's experiences through each of the steps are expected to be insightful for our INCA members and guests. He is very apt at handling questions and in helping us to gain greater understanding of product development.

Joel is President of Product Ventures LLC productventures@aol.com (301) 656 1867

For our MARCH 19 program, Dr William D. Jackson, IEEE Fellow, will be discussing "The Role of Invention in Technology Research, Development and Demonstration".

Dr Jackson, President of HMJ Corp of Kensington, Md has wide-ranging experience in what is often called the R, D & D process. His roles have included industry project manager, government program manager, academic, consultant, SBIR funding recipient and inventor. His technical experiences have involved electronics, computer development, bioengineering and ENERGY.

He expects to help INCA inventors become oriented to the R, D & D process and its phases. He will share "what has to be done" to get support from both Government and industry. There are pitfalls awaiting an inventor as he tries to win acceptance of creation(s).

His neighbor, friend and "co-conspirator": our Jerry Porter, will be introducing Mr Jackson.

INCA business = Our strength as inventor-developers.

Our February and March meetings will include a process of volunteering-for those essential executive actions that make the INCA President look good, INCA membership to grow and our INCA inventor associates to be even wiser (and more well-off) than ever. The March newsletter will include the grid-for-volunteering that we grow in Feb to encourage the range of Presidential and officer candidates for FY 2001.

Special Thanks to Mr Jim Meisner, our January speaker and author of a forthcoming book, "SOAR TO SUCCESS THE WRIGHT WAY".

Jim captured this entrepreneurial audience with his colorful and accurate description of how the Wright brothers employed their sense of entrepreneurship, clear logic and sound judgements to solve "the flying problem" and to be suitably rewarded.

They utilized good science even though they were not formally educated as scientists.

They communicated with leaders in their field of interest.

They learned to let their experimental apparatus teach them.

They maintained their economic freedom by paying all their own costs from their own resources.

They converted their good ideas into legally-strong intellectual property.

And for their 5-year odyssey of development, their family-business team held a clear and simple vision of what "success" would look like, and how it would be measured.

Mr Meisner showed how the big prize for solving "the flying problem" was being sought by many teams. Lilienthal of Germany and Langley of the Smithsonian had found ways for a heavier-than-air apparatus to be airborne. Lilienthal had crashed and died for lack of a means for timely pitch control. Langley's steampowered small model made a short, powered flight across a portion of the Potomac river.

The Wrights asked the Smithsonian to send them all available information regarding flying. Airflight theories were in abundance; principles for constructing strong, light-weight structures were at hand; some heat-engines offered rotation with torque for power; but no data was available from which to validate the fluid dynamics of lift needed for controlled flight. The brothers spent two seasons of gliding/crashing with few minutes of air time.

Octave Chanute, a French engineer and newsletter editor showed great interest in the Wright's project. His advice about multiple, yet conflicting, theories about aerodynamics-of-lifting was to "learn through measurement". The Wright brothers build a venturi-shape tube and connected their shop's engine to an exit

fan. Air was accelerated as it was drawn through the venturi's high-velocity throat, and scaled shapes were held in that measured airflow so as to also measure lift from each of the shapes - at a range of velocities and a range of angles. With simple arithmetic comparison, the brothers could calculate wing and elevator sizes to lift defined loads at defined wind-speeds. They devised a near-perfect propeller shape and a wing-warp control to balance lift or to deflect one wing.

Their flight tests at Kittyhawk used a glider to practice heavier-than-air flight.

As they "warped" one side of their wing in an attempt to change radial heading, the glider would quickly gouge its lowered wing into the sand as it would slip sideways and downward through the air. Their solution was to add a vertical tail, like a rudder of a boat.

[The simple deflection of a rudder would rotate heading in a skid, but would not change direction of flight.] When coordinated, actuating a warped wing and the rudder permitted an actual change of lateral direction. Their glider's behavior had taught them how to turn.

As they prepared to add an engine to a bigger flying machine, they did not realize how far they were ahead of their competitors toward solving the flying problem. Their contribution toward SUCCESS was control of the flying process. Fortunately, the process and hardware dedicated to control in the flying problem was not obvious to observers of that period.

The older brother was a good writer and attempted to "pro se" their invention into a strong patent. Europe's prior disclosure laws were particularly strict. Mr Chanute's magazine articles of information from the Wright's letters and photographs was turning out to be evidence against being awarded the European intellectual property they sought.

Professional help was found in a New York Patent Attorney who cast out an amazingly simple, yet strong, set of claims with supportive specifications and drawings. That application was about controls for a flying machine and was issued. Aviation firms either licensed these claims or were subject to timely lawsuits which were won by Wright's patent attorney.

Mr. Jim Meisner tells the story of initial aviation in America with care and drama. He links the principles of good science and responsible development to the Wright family. He shows how they focused their gentlemanly talent and seasonal resources in demonstrating their contribution toward enhancing mankind. This is a message that fits the 100th anniversary of the first flight, and is suitable for pre-science and science-oriented American school children.

This is a story of SUCCESS because it reveals how responsibly-ambitious people can select the greatest known problem of their era, research it, learn through its development, and deliver a contribution that greatly exceeds their sufficient and timely reward.

The characteristics that guided Wilbur and Orville Wright included:

Curiosity - wondering about and trying out. Confidence - belief based on past successes Collaboration - sharing ideas with others Dedication - sticking to goals Efficiency - valuing "best ways"

Humor -laughing at temporary difficulties Creativity - new ideas and new ways of thinking Optimism - knowing that good goals are reached Patience - keep trying Relaxation - thinking "outside the box" Self-reliance - willing and able to do the work LUCK - a significant by-product of SUCCESS

Thanks to Jim Meisner (757) 566 0604 2309 Harness court, Toano Va 23168 Thewrightway@www.com

UIA Business

Joanne Hayes-Rines, publisher of **Inventors Digest**, has capability to communicate with more than 3000 e-contacts as a source for specific problems of interest to the inventor community. Question 4 ID@aol.com

EXCEPTION RULE: Do not use this query channel to ask about how-to-patent or find-a-licensee. Go to www.uiausa.org (Or http://inca.hispeed.com) for these "how-to" inquiries.

George Pierce of the Dayton Inventors group inventflash@listbot.com relays UIA messages.

Have you invented a TRAVEL related product and put it on the market? Or . . Have you invented a SPORTS related product and put it on the market?

If you have a travel or sports product on the market, we'd like to feature you in an upcoming issue of INVENTORS' DIGEST. We'd like to tell your story and give you some publicity.

Here's what you need to do: * Send us a press kit which should include information about

- -how you developed your product,
- -a description of your product w sales information, and excellent photos of you and your product.

Products will be selected based on the quality of the information and the quality of the photos. (digital photos must be at least 200 d.p.i. - no Polaroid photos). Deadline is February 23, 2001.

Send the information to: Assistant Editor INVENTORS' DIGEST 30-31 Union Wharf Boston, MA 02109

* We're also looking for tips on how to "jump start" creativity.

What do you do when you're mentally "stuck" and can't seem to solve a problem?

Send your tips to us at Inventorsd@aol.com and we'll share them with others!

Sincerely, Joanne Hayes-Rines, Publisher www.inventorsdigest.com

REAL VALUE FROM INTERNAL INTELLECTUAL PROPERTY:

Ideas from American Airline employees built up a value sufficient to purchase a new BOEING airplane for American Airlines.

A TV report on Jan 31 described how the management of American Airlines asked their own employees for enough ideas on how to save money that they could buy a new aircraft.

The employees, generated their Intellectual Property ideas and delivered them to their in-house sponsor. American Airlines (AA) selected and implemented enough of the cost reduction ideas to purchase a new airliner (perhaps about \$54 million).

In recognition, the individuals who generated major ideas were flown to Seattle where they were shown how BOEING implemented some of them on the new planes being purchased.. Then they all rode back to Dallas on the maiden flight of the plane their ideas had bought.

- Nice Party -

Beware of Area Code 809 telephone scam says a friend of a friend of Ray. It seems this area code is located in the British Virgin Islands and the scam connects to a "pay per call" number that will charge the US caller \$2,425.00 per minute. Probably not worth the experiment!!!!

Subj: GovCon Newsletter Date: 1/23/01 From: newsletter@vertical.net (GovCon)

Need help finding customers online? Central might help. Register your site on over 400 search engines, target create a customer list for direct marketing, and more. Visit http://www.govcon.com/welcome/bcentral.

Book Selection -- Virtual Teams: People Working Across Boundaries with Technology
This is the definitive book on managing successful virtual companies. Jessica Lipnack and Jeffrey Stamps have popularized the 90/10 rule--ninety percent people and ten percent technology; this edition concentrates on the importance of focusing first on people and describes how to make virtual work real.
Our Price \$24.99 FREE Shipping!! (U.S. orders only) http://www.govcon.com/read/nl20010122/387389

INVENTOR STORY By CLARISSA SPASYK Journal staff writer Jan 7 01 [w INCA edits]

Palmer Robeson always wanted to be an inventor. While the McLean native grew up, he played in his father's workshop, restoring old cars. Robeson's day job is an accountant at the U.S. Dep. of Education.

His father told him he "should invent something". Now at age 53, Robeson has two patents, thanks to the Blizzard of 1996. His white jeep Cherokee got stuck in a foot and a half of snow during the storm which brought havoc on the metropolitan Washington, D.C., area with 25 inches of the heavy precipitation. He said the incident -- part of a day-long ordeal of problem after problem -- reminded him of the scene in "Gone with the Wind" when Scarlett O'Hara took a bite of a turnip. Just as Scarlett replied, "As God is my witness, I'll never go hungry again," Robeson thought he would never get his car stuck in wintry weather again.

And now he hasn't. His invention is called the Emergency Traction Device (ETD). The ETD differs from popular tire chains. To use chains, a person either has to lay them out and drive over them or jack up the car. ``It's a messy job and very hard to do," Robeson said. Additionally, chains are size specific, not fitting a wide range of tires, he said.

His invention is made of springs, steel aircraft cable and steel tubing to fit tires with 22 to 31-inch diameters and 175 to 275-mm widths. The four-armed device, placed next to a tire, works by twisting a crank. The springs tighten, wrap around the tire and are locked in place. The ETD is designed to be convenient as a one-size-fits-all product that works for short trips at low speed.

Robeson's marketing ideas for the ETD invention include tapping the consumer market of women drivers. There are approx. 200 million vehicles in the United States. Palmer estimates that half our drivers are women.

His invention and development experience is attributed to a mixture of the grace of God and luck. As an accountant, not a mechanical engineer he received help from many people who crossed his path.

In talking with a new next-door neighbor about Virginia Tech, he discovered a person with mechanical engineering and patent expertise. Chris Campbell, a patent attorney at Hunton & Williams and former patent examiner, offered free advice and helped guide Robeson. A coworker also referred him as a novice inventor to Advanced Technology and Research Corp. ATR, based in Burtonsville, Md.

ATR prepared an SBIR* grant proposal to the U.S. Forest Service, part of the Department of Agriculture. ATR will conduct the engineering on this invention. Jackson Yang, president of ATR, observed: ``The concept to design to prototype is a long process."

Robeson's second prototype weighs 12.5 lbs. Mr Yang estimates that with better engineering and lighter materials, its weight could be reduced by 3 or 4 lbs, and still fit easily in the back of a car's trunk.

*Robeson and Yang expect to find out whether they will receive the proposed \$70,000 grant in March. The grant would go to ATR, where employees would start the engineering work.

Robeson presented his Emergency Traction Device to a studio audience of a pilot television program that aired on WETA in October. He was one of five area inventors featured in the pilot run show ``Inventing USA". As winner of the audience's favorite inventor, he was awarded \$10,000 and a half a day's consultation with an inventor mentor.

Robeson wants to negotiate a licensing agreement with a marketing and manufacturing company, and see his device on many store shelves. Karen Robeson, his wife of 29 years, chimed in: `'I'd be happy with our first one million from royalties."

During the last four years, she's been especially impressed with her husband's perseverance. ``When you reach a certain age you think you can't start something new," said Karen Robeson, who framed and hung her husband's first drawings of the device over the dining-room table. ``But that isn't true."

Robeson agreed; ``It's also been a lot of fun, motivating and very inspirational," he said. He doesn't scoff at being called a "backyard inventor". ``I'm in good company," he said. ``Bill Gates was a backyard inventor."

This year's Invention Contest Announced for Hammacher Schlemmer:

From now until May 14th, 2001, we'll be accepting patented inventions as candidates in a contest that offers a First Prize grant of \$5,000. Any new product that offers a unique, innovative or functional benefit to the general household market will be considered for the competition. Final judging among the semi-finalists will take place in early September in our New York store. Write for an entry form to:

SEARCH FOR INVENTION 2001 C/O Hammacher Schlemmer 303 W. Erie Street Chicago, IL 60610 Or call 773-INVENT-1 or visit www.hammacher.com

TEACHERS:

"inVenture" Manuals (Adventures in inventing) are now available on the web. Through the generosity of Dr. Ron Versic, Inventors Council of Dayton, both the Teacher's Manual and the Student Guide can be downloaded at http://www.uiausa.org/Inventure.htm

UIA Featured Article for Feb is "The Retail Buyer-Gatekeeper to the Marketplace" by Dr. Jerry Udell, WIN Innovation Network http://www.uiausa.org/FeaturedArticle.htm

Don Kelly at Dover Del, Feb 20. Don will be a featured speaker at an upcoming Delaware State University conference, <u>Protecting Your Intellectual Property</u>. Don is Chief Executive Officer of the Academy of Applied Science, a world leader in the promotion of innovation.

The conference is set for February 20, 2001 on the campus of Delaware State University in Dover. Sponsored by the University and the Small Business Development Center, the program will cover, patents, trademarks, copyrights, trade secrets, and intellectual property protection for software. The event is designed to benefit inventors, scientists, engineers, business developers, writers, service and retail businesses.

SBDC Director Jim Crisfield will moderate the program which also will include Tom Melvin of the University of Delaware Patent Library, and University of Delaware Administrator for Intellectual Property, Michael Clerkin. The one-day workshop fee is \$50. For more information call 302-678-1555.

INCA ELECTION OPTIONS E-mail from Ray to Bill.

In preparation for the annual election of officers, I am thinking of listing the "executive tasks" that have grown to be expected within the volunteer base of INCA. As you know, many of the total tasks and opportunities have been voluntarily taken by perceptive members. Perhaps other very capable members have not been expressly asked, "What part of the load would you like to carry?".

Note the actual popularity of John Kennedy's expression: 'Ask not what your country can do for you; ask what you can do for your country". Let country = INCA.

I started the list of executive tasks (and satisfactions) that I knew about. Of course it can grow to a page-full at least by early March. With a grid to collect names and performance period(s); and an in-meeting collection scheme, we might have a team of directors and regular volunteers that would greatly enhance the freedom and pleasure within the chief executive role. At the conclusion of discussion about filling the grid, I believe there will be an abundance of viable candidates who volunteer for the regular executive actions at and between meetings. Then, with resources visible and committed, an election for President, other officers and (executive-level directors) can be conducted.

As usual, I have probably scoped 5 pounds of sugar for a one-pound bag. As you visualize how to make the March event work, I am willing to assist in personal communication with candidates for functional tasks who can welcome their INCA role as compatible within their business, professional and transitional lives.

Subj: Trading on New Ideas: Free Intellectual Property Exchange Debuts From: gcomm@astound.net [Global Commerce & Communication, Inc.(GCC)]

GCC debuts **NewIdeaTrade.com**, a free online forum for trading intellectual property including industrial property and copyrighted property. (The intellectual property transfer market is estimated to be worth over \$100 billion.

Dr. Niaz Ahmed, founder, and Dr. Neil Armand have set out to build an affordable exchange of intellectual property among small businesses, research institutions, independent inventors, and the creative community.

Alternative services may charge browsing fees of \$500 to \$5,000 per year. Transaction commissions may range between 10 to 20 percent.

In contrast, NewIdeaTrade.com is advertiser-supported to provide a central registry for small businesses, individuals, universities, government agencies, research institutions, and investors to find each other. Users must register to participate but there are no membership fees for buyers or sellers of intellectual property.

Contact: Global Commerce & Communication, Inc. Saint Cloud, Minnesota, USA

Dr. Neil Armand or Dr. Niaz Ahmed

Email: info@newideatrade.com or globalcom@astound.net Telephone: 320-250-0950 http://www.newideatrade.com

40 members have paid their INCA \$36 dues for 2001 as of 8 Feb. 12 more mail-only subscribers to INCA have paid \$10.

If your name label has 12/2001 on it, you are an up-to-date member.

Paying these modest dues with a timely check is a critical part of making this volunteer, not-for-profit organization work. 47 are still due.

ENGINEER'S WEEK OCCURS in FEBRUARY - since 1951

This is the profession that has used invention to change our American living environment into the best. SMILE AT AN ENGINEER.

Bill Kuntz has been in Florida where he found these learnings:

I've learned that our dog doesn't want to eat my broccoli either. Age 7
I've learned that when I wave to people in the country, they stop what they are doing and wave back. Age 9
've learned that if you want to cheer yourself up, you should try cheering someone else up. Age 14

I've learned that silent company is often more healing than words of advice. Age 24 I've learned that wherever I go, the world's worst drivers have followed me there. Age 29 I've learned that it pays to believe in miracles. I've seen several. Age 75

To: raybik@aol.com

From: "Global Commerce & Communication, Inc."

Date: Mon, 18 Dec 2000 10:59:49

Subject: Trading on New Ideas: Free Intellectual Property Exchange Debuts

Pompous proposal: Well informed people know it is impossible to transmit the voice over

wires and that were it possible to do so, the thing would be of no practical value.

- Editorial in the Boston Post (1865)

That the automobile has practically reached the limit of its development is suggested by the fact that during the past year no improvements of a radical nature have been introduced. - Scientific American, Jan. 2, 1909

Heavier-than-air flying machines are impossible.- Lord Kelvin, ca. 1895, British mathematician and physicist.

meliusstudio@erols.com (John Melius)

thesceptics

What can be more palpably absurd than the prospect held out of

locomotives traveling twice as fast as stagecoaches?

- The Quarterly Review, England (March 1825)

The abolishment of pain in surgery is a chimera. It is absurd to go on seeking it.... Knife and pain are two words in surgery that must forever be associated in the consciousness of the patient.

- Dr. Alfred Velpeau (1839) French surgeon

Men might as well project a voyage to the Moon as attempt to employ steam navigation against the stormy North Atlantic Ocean.

- Dr. Dionysus Lardner (1838) Professor of Natural Philosophy and Astronomy, University College, London

The foolish idea of shooting at the moon is an example of the absurd length to which vicious specialization will carry scientists working in thought-tight compartments.

- A.W. Bickerton (1926) Professor of Physics and Chemistry,
Canterbury College, New Zealand

[W]hen the Paris Exhibition closes electric light will close with it and no more be heard of.

- Erasmus Wilson (1878) Professor at Oxford University

WHAT IS THE VALUE OF AN IDEA? At least the comparative price of "How the idea -:

is appealing to its originator? -instant entertainment [1]

s shared privately with a friend or family-support member? -ego satisfaction [2]

is sketched, dated and explained in an inventor's notebook? -future evidence [3]

-record of the idea [4]

is market-searched, patent-searched and made "practical"? -a diligent possibility [5] is particularly appealing to associates having the full talent for making it and bringing it to a market channel? -a project [6] meets criteria already expressed by market spokesperson(s)? -a market prospect [7] has been converted to a patent, copyright or trademark? -a property [8] enhances another firm's product line, and has an internal advocate? -a potential invitation to negotiate license [8] or assignment [9] can be produced within resources available to the project resources? -a business [10] can be demonstrated profitably in a market niche? -an investment [11] can be marketed as a going business with a track record? -an exit strategy [12] can be equated to net \$ for each of the aforementioned steps? -a business plan [13] to form the basis for an IPO? -a bigger business plan [14] Therefore: inventors, who expect to deal equitably with a business community, will define their business plan with as much attention as has been given to their inventive ideas and accumulation of intellectual properties. What is the INCA response to "Value by Comparison" for each of these 14 money angles. -instant entertainment [1] A rented movie-\$4 or a seat at the Opera \$100 {My Value 1 = \$_____ -ego satisfaction [2] My name on a sport's team's sweatshirts \$50 -or my cost for my issued patent \$4000 ${My \ Value \ 2 = \$}_{___}$ -future evidence [3] -record of the idea [4]-a business possibility [5]-a project [6]-a market prospect [7] (performance and cost) -a property [8] -a potential invitation to negotiate license [8] or assignment [9]

-a business [10]

-an investment [11]-an exit strategy [12]-a business plan [13]

-a bigger business plan [14]

Notice: No federal reward for a patent.