



THE PATRICK COLLINS ADDRESS TO THE SPACE RENAISSANCE PRESS CONFERENCE



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THE MOST COSTLY ERROR OF ECONOMIC POLICY OF THE LAST HALF CENTURY

- "On the evening of 3rd October, 1942, Walter Dornberger held a party.
- That day his team developing the V2 rocket had succeeded in achieving the first space flight.
- Dornberger and his team drank a toast to the future of Space Travel after the war was over.
- However, 67 years later we are still waiting to start passenger space travel! - even just short, sub-orbital flights like the V2 - which Dornberger's team could easily have started by 1950!
- Yuri Gagarin made the first flight to orbit in April 1961, riding on a version of the R7 inter-continental missile.
- Since that time, governments have spent about 2 TRILLION dollars on space development.
- However, that same rocket, nowadays known as Soyuz, of which 1,700 have been made and flown, is still the cheapest way to travel to orbit!
- That is, the cost of traveling to orbit has not fallen at all in 46 years!
- I believe that this is the most costly error of economic policy of the last half century: spending trillions of dollars of taxpayers' money on space technology - without reducing the cost of space travel at all.



MARKET RESEARCH SHOWS THAT MOST PEOPLE WOULD LIKE TO TAKE A TRIP TO SPACE

- This has been a costly mistake because market research shows that MOST people would like to take a trip to space.
- Engineers can show that if even 1 million people per year took a short sub-orbital flight, the cost would fall to just a few thousand dollars per passenger.
- Please remember that several million people fly on aeroplanes every DAY - so 1 million sub-orbital passengers per YEAR is a clearly an easy target.
- In 2002 NASA even published a report which concluded that the sub-orbital passenger travel business could grow several times larger than the commercial satellite industry.
- The good news is that work is now under way by companies in several countries to start sub-orbital flights within the next few years.
- The U.S. Federal Aviation Administration (FAA) is doing good work to help this - though its budget for this work is less than 1/1,000 of Nasa's budget.



A MAJOR CAUSE OF THE CURRENT RECESSION IS LACK OF NEW INDUSTRIES

- The world economy is now falling into a historically deep recession, of which a major cause is the LACK OF NEW INDUSTRIES.
- Older industries have rationalised and moved to lower-cost countries, leaving huge numbers of well-educated people in the richer countries without productive jobs.
- Governments talk of trying to stimulate growth of new industries - and they pour huge amounts of money into the overgrown finance industry, and smaller amounts into information technology, energy, medical research and other fields.
- However, astoundingly, the space industry today is one of the DECLINING industries! Space industry employment in the rich countries is falling - and growing in China and India!
- There are in fact very few space activities other than taxpayer-funded space agencies.
- (NB most of the new jobs counted by the space industry are for television broadcasting using satellites: this has nothing to do with economic development in space.)



A FEW PERCENT OF WHAT GOVERNMENTS ALREADY SPEND ON SPACE AGENCIES WOULD BE ENOUGH

- In order to have vigorous growth of passenger space travel services up to the scale of passenger air travel, we need only a few percent of what governments already spend on space agencies.
- If a few percent of this funding is given to the civil aviation industry, it will create a new industry the size of passenger air travel - which supports 50 million jobs around the world!
- Moreover, the rocket fuel used will be hydrogen, which can be produced from water using electricity from solar panels or wind power, so it need cause no pollution.
- Once sub-orbital services are under way, investment of a few billion Euros will develop reusable ORBITAL passenger vehicles.
- These will open up the orbital travel market which will grow tens of times larger than sub-orbital flights.



1 BILLION / YEAR INVESTED FOR 5 YEARS COULD CREATE A 5 BILLION/YEAR INDUSTRY IN 10 YEARS

- There are numerous ways in which governments could help to accelerate this development which promises to create millions of well-paid jobs.
- In round figures, 1 billion invested over the next five years could create a 5 billion/year industry in 10 years' time.
- If, in parallel, just 5% of what space agencies spend was devoted to developing low-cost orbital travel, we could see the orbital hotel industry booming 15 years from now.
- This investment will create far more jobs than giving even 100 times as much funding to bankers and financiers.
- And please just think of the stimulating effect it will have on young people to know that they are going to be able to travel into space themselves!



SPACE TRAVEL INDUSTRY WILL RAISE A SPACE RENAISSANCE CULTURAL MOVEMENT

- One of the problems in the richer countries is the "drift away from Science" in schools.
- Yet starting a space travel industry will make engineering and science the most popular subjects for young people, and thereby create the scientifically knowledgeable work-force which we need to solve global problems, while also opening up access to the limitless resources of space.
- This is why we call this movement the "Space Renaissance".
- It is not only a Renaissance of the mis-directed space industry, it will also create a world-wide Renaissance - an optimistic cultural rebirth which will create the resources needed for everyone to have a good standard of living.



SPACE TRAVEL IS THE MOST PROMISING INDUSTRY AGAINST UNEMPLOYMENT AND RESOURCE WARS

- What are the worst problems facing humans today?
- Unemployment and Resource Wars.
- There is NO investment today that will do more to solve these problems than developing low-cost passenger space travel.
- By sharply reducing the cost of ALL space activities, this will create unlimited job opportunities, of which ever larger numbers will be outside the Earth's eco-system.
- In the worst economic crisis for a century, what should the space industry be doing?
- Clearly it should be trying to contribute to sustainable economic growth, and to create new employment.
- This means supplying services that large numbers of people wish to buy.
- Nothing else is nearly as promising as supplying passenger space travel services.
- I think this is why the Space Renaissance Initiative is growing so fast.



ROCKET-ASSISTED AIRCRAFT WERE CERTIFIED FOR PASSENGER-CARRYING IN 1952!

- The space industry today is grossly under-achieving: sub-orbital passenger space travel could have started in 1950!
- If that had happened, orbital passenger space travel could have started in the 1960s.
- Luckily the civil aviation industry offers a better way: rocket-assisted aircraft were certified for passenger-carrying in 1952!
- They didn't go to space - but even 57 years ago the civil aviation industry already knew how to certify rocket engines for piloted, passenger-carrying aircraft.
- So just give the aviation industry the funding they need - just 1 billion per year - and in a few years we will have a booming new industry of sub-orbital passenger travel.
- In ten years we will start orbital test flights, and in twenty years we will be well into "THE LONG BOOM" - the true "Space Renaissance" whereby humans will grow up to become a space-faring species, caring for its home planet, and collaborating globally to ensure peace and plenty for all.
- This new industry will also enable an ever-improving environment, and ever-expanding economic activities outside the Earth - in a number of convenient orbits, on the Moon, on asteroids, and even on Mars.



SUB-ORBITAL PROJECTS ARE READY AND JUST WAITING FOR CASH

- And please don't let politicians fob you off with: "This would take years to organise."
- It took them just DAYS to give tens of billions to the banksters!
- Or: "We've spent so much bailing out the financial system that there's no funding available for this work."
- Such arguments are nonsense, based on deception about what money is.
- Money is just a ticket - for saying who can order what activities to be done.
- So long as there are unemployed rocket engineers, and huge numbers of people wanting to buy space travel services, there are resources which can be put to work!
- It need take no more than a few hours to fund sub-orbital projects that are ready and just waiting for cash to get into high gear.
- Providing funding to develop low-cost space travel will be far more beneficial than giving even 100 times more to the ridiculous and corrupt financial world - which has failed to fund this vitally important work for 60 years - and has now caused an economic depression . . . due to LACK OF NEW INDUSTRIES!
- I rest my case.