fly the frenzied skies
CREATIVE
BOLD
INNOVATIVE
YOUNG

Advertising Graphics • Annual Reports • Book & Package Design • Posters • Audio
Visual Programs • Brochures • Corporate Identification Programs • Business Card &
Letterhead Design • Trademarks & Logos • Promotional Aids • Overhead Projector
Transparencies • Color Cells • Typography

Technical Graphics • High Impact Technical Documentation Systems • Illustration •
Scientific Presentations • Drafting • Microfilm • Printed Circuit Masters • Design

See the portfolio behind these words. We think you'll be impressed. You'll like our
coffee too!

graphic arts
collaborative
42 Grove St., Boston, MA  (617)523-4164
A DIVISION OF CATALYST!
REASON on current events. Published monthly by the staff at 42 Euston Road, Brighton, Mass. 02135. Phone: (617) 787-0228.

Single copies: 25¢. Subscriptions: 12 issues for $2. Back issues from Vol 1 Number 4 on are available: 25¢ each. Overseas subscribers should include sufficient additional funds if they desire air delivery. Please allow four weeks for changes of address, and give both old and new addresses in all requests.

Lanny Friedlander, publisher-editor
Robert Lawrence, art director
Mark Frazier, production
Ann Kateell, production

Advertisers in REASON do not necessarily agree with our editorial positions, nor do we necessarily endorse their products or services.

Fly The Frenzied Skies
Robert Poole Jr. 2

The Avenging World
Steve Ditko 6

Editor's Notes 21
There they sit, on the steaming hot concrete apron: jets, dozens of them— sleek, shiny birds, screeching and spewing effluents, glistening and glimmering in the hot wavery air. Waiting.

Waiting to leave, to lift off, to soar. Once in the sky, these magnificent machines sweep along at 600 miles an hour — once in the sky. Today, however, they wait, one behind the other, perched massively on silver struts atop puny Goodyear claws, looking like flightless flamingoes, impressive but impotent, a mockery of themselves.

Aboard one place, a bureau, like a heavy from Ayn Rand’s Atlas Shrugged, corners a stewardess and demands that the pilot call the control tower, and get this crate in the air. Back flashes an answer from control:
The dignitary will kindly wait, just like everyone else. Tough luck for the bureaucrat.

A fitting reproach, though, really. For, if this bureaucrat is like the rest, it is his ideas, the bromides he dares to call convictions, that are responsible for the disaster he so hotly denounces. It is his legalized coercion, his forced cartels, his restrictions and his subsidies, which are the cause of the mess.

These birds, you see, these strong, innocent, friendly birds, are not free. They have been tied down and strung up, like metal Gullivers on the island of Lilliput, by two hoards of neurotic pygmies using millions of tiny strands of red tape: the Federal Aviation Administration (FAA) and the Civil Aeronautics Board (CAB).
And that, simply that, is the essence of the crisis in the air. — ED.

Robert Poole Jr

A private business whose sales volume had increased 15-20% annually for seven years (and showed many signs of continuing to do so) would probably view its future with greater anticipation. In the government-controlled, privately “owned” cartel known as commercial aviation, however, the expected growth in air travel is viewed, in part, in horror. For as the volume of air traffic rises, a monumental crisis appears imminent, a crisis that threatens the complete paralysis of air transportation. What is the source of this seeming paradox?

How can it be that the same industry that will be flying, fueling, and servicing the huge 747 next year, is unable to solve seemingly simple problems of supply and demand? The answer is not at all a difficult one to arrive at, provided one views the problem in its full scope, without recourse to the self-imposed blind spots that have plagued mass media “analysis” of the subject.

“Commercial aviation” consists of three distinct parts: the airports, the airways linking airports, and the airlines.

Although there are 10,000 airports in the U.S., many of them privately owned, all 525 of those large enough to handle scheduled airline service are owned by city governments (except Dulles and Washington National which belong to the federal government). These large airports are financed from taxes levied on local citizens, taxes they must pay whether or not they fly. Limited federal aid tax money is available for building runways at these airports, thus forcing many citizens quite remote from airports to pay for them. During the last ten years the pace of airport expansion has lagged far behind the growth in air traffic, because 1) local governments have little political incentive (or expertise) to accurately forecast passenger demand, 2) Congress has let the annual appropriation for airport aid gradually decrease, despite constantly increasing requests for such aid, and 3) local taxpayers are becoming increasingly hostile to higher taxes, especially for things which do not directly benefit them. Hourly capacity restrictions have already been imposed by the federal government at major east coast airports, because of the increasing congestion at terminals and on runways. When the 365-passenger 747 and the 300-passenger airbuses go into service in the next few years, only a handful of airports will have terminal facilities or access roads adequate for such large concentrations of people.

The airlines consist of a number of a number of paths in the sky, defined by ground-based radio navigation stations (navais). The Federal Aviation Administration (FAA) owns and operates the navais and polices the airways. Anywhere above 3500 feet and in the vicinity of airports, all aircraft must fly under FAA control. Although modern electronics and computer technology make nearly automatic air traffic control technologically feasible, the FAA still relies on the early 1950’s method of using navais only as references, with all control and decision-making in the hands of a (human) FAA air traffic controller. Because of limited funding by Congress, there aren’t enough controllers, their salaries are low, and their training is poor. Combined with the high volume of air traffic, these conditions make today’s controller extremely overworked, in many cases literally a nervous wreck. Another consequence and cause, perhaps, of the controller shortage is the fact that these men are “daily forced to compromise with safety procedures” in order to handle their workload. The controllers’ slowdowns of 1968 and 1969, and their disastrous effects on flight schedules, illustrate how close to collapse the existing ATC system is.

The FAA’s operations are financed out of general federal tax receipts (the tax on airline tickets goes into general revenue, while the tax on aviation gasoline goes into the highway trust fund). Thus, as long as there aren’t many crashes, Congress is content to appropriate meager sums for the FAA.2 The taxpayers, 60% of whom have never flown at all, justifiably feel little desire to be taxed even further to provide airways for the mere 15% who fly commercial airlines.

Finally, the airlines themselves present an interesting picture. Though nominally private companies, the airlines in fact are controlled by the Civil Aeronautics Board (CAB) in every essential aspect of their business. The routes between cities are divided up among the airlines as a huge cartel, organized and enforced by the CAB, thus making free entry into the market illegal. Likewise, it is nearly impossible for an airline to leave a particular market (by dropping a city from its schedule) — the “public necessity and convenience” must be served, apparently regardless of losses. The prices charged customers for a particular route are fixed by CAB, in order to prevent “destructive” price competition. Price increases are permitted to the airlines only as a group, and price decreases, while allowed on an individual basis, must still be run through the mill of CAB. If companies in the steel industry tried to set up such an arrangement, they would be prosecuted by the Antitrust Division of the Justice Department. Indeed, the contradiction between the CAB’s philosophy and the antitrust laws was illustrated last summer, when the CAB had to grant the airlines temporary immunity from antitrust action so that they could meet together to discuss coordinating their schedules, so as to relieve rush-hour airport congestion.

As if this were not enough, 13 local service airlines, which were formed after World War II with surplus aircraft and “temporary” subsidies, continue to receive on the order of $50 million per year in subsidy payments, out of general tax revenues. Thus, taxpayers are forced to pay huge direct subsidies, in addition to the countless indirect subsidies they provide in the form of “free” airways, weather reports, landing aids, and mail contracts.

* See p. 22
The net result of these government activities is that at least three distinct groups of people are being victimized. First, the vast majority of taxpayers who do not use the airlines are being unjustly taxed so that those who do fly can have air travel at less than its true cost. Second, the most competent, aggressive airlines owners (and potential airline owners) are being prevented from engaging in competition with the less competent companies, with the result that neither the more competent companies nor their stockholders can benefit as fully as they could and should. Third, the people who do fly are getting less efficient and less safe air service than, in the absence of government interference, they might; less efficient because of the lack of competition, and less safe because of the antiquated, under-funded, congested airport and airways system.

The question which should be obvious by now is: How, in "capitalist" America did such a horrendous tangle of vested interests and government control every come to pass? The standard "conservative" mythology holds that all of America's economic troubles began with FDR's New Deal. The sad fact of the matter is that government interference with and subsidy to American Aviation has a long "non-partisan" history.

History of a crisis
Throughout the history of American aviation the general rule has been that each expansion of government control was preceded by requests for such regulation from one or another group of people involved in aviation. At each step of the way, of course, the proponents did not foresee or advocate any further government involvement — they merely wished to blindly promote their own short-range special interest.

Federal involvement began in 1915 when when President Wilson selected a number number of aviation enthusiasts to form the National Advisory Committee on Aeronautics (NACA) to "study ... the problems of flight, with a view of their practical solution." The impetus for setting up NACA was World War I, but as with many government agencies, NACA emerged in 1919 as a permanent entity, and became a vigorous advocate of government control of aviation. Former wartime aircraft producer Howard Coffin strongly supported NACA's position. During the war Coffin had been picked to head the government's Aircraft Production Board, which passed out over $1 billion in aircraft contracts to his own company and those of his fellow auto producers. 3 Coffin and his friends ignored the advice of many aircraft designers and mass-produced the Liberty aircraft engine along automotive lines, which made it a poor aircraft powerplant. They also produced 10,500 DH-4 aircraft, only a few of which ever reached Europe. The remaining planes were subsequently sold as war surplus for 2% of their cost and the resulting postwar glut of cheap aircraft greatly depressed the market for new designs. The DH-4 with Liberty engines won the nickname of "flaming coffin" in the post-war years.

In 1918, at the urging of NACA, the Post Office inaugurated airmail service. Using the "coffins", post office service was risky at best. By 1925, 31 of the first 40 airmail pilots had been killed in crashes. Somehow, during the same 6-year periods, the safety record of many of the fledgling commercial operators was much better. In 1925 a government investigating board recommended that the Post Office let airmail contracts to private companies, rather than flying the mail themselves; Congress agreed, and passed the Kelly Airmail Act. One of the results was the formation of three "conglomerate" aviation companies — United Aircraft and Transport, North American (under GM control), and AVCO — which proceed to win most of the longer airmail routes.

During these years NACA continued to propose bills calling for federal regulations. These bills received opposition from such diverse sources as state and local bar associations, the American Legion, presidents Wilson and Harding, and Secretary of Commerce Herbert Hoover. In addition, a number of airline owners (and would-be owners) asked Congress for regulations and subsidy: regulation to win public confidence and subsidy to keep them in business regardless of the market or their ability. One of the most common appeals was that the U.S. must not fall behind Europe, where governments were setting up airlines and subsidizing their operations.

The outgrowth of this lobbying was the Air Commerce Act of 1926, which firmly asserted the government's authority over aviation, giving it authority to "foster air commerce", provide airways and nav aids, conduct research and design, issue licenses and aircraft certificates, and investigate accidents. Both President Coolidge and Secretary Hoover
Hoover had worked for the passage of this act, considering it only as a means of "strengthening private enterprise". As Prof. Donald Whitnah points out, "in 1926 rate-fixing and the awarding of exclusive operating franchises to airlines were hardly conceivable to the majority of the framers of the legislation".4

By 1930, however, the government had already begun to flex its newly-authorized muscle. Hoover's Postmaster General, Walter F. Brown, decided that there was too much "chaos" and competition in aviation and decided to "foster air commerce" by forcing mergers and consolidation, using airmail contracts as his "persuader". Previously, of course, these contracts had been let to the lowest bidder. Brown proposed a new law allowing him to select contractors "by negotiation" (on the basis of cooperation with his master plan), and to pay them on the basis of the size of their aircraft, rather than the amount of mail they carried. Congress approved the latter idea but refused to allow Brown full discretion in selecting contractors. Nonetheless, Brown proceeded on his own, at first attempting to persuade various airlines to merge. When that failed, he "arbitrarily selected those companies he believed most suitable", and awarded them the routes. Lines which didn't cooperate had their contracts (and thereby their route authority) cancelled.

When the democrats came to power in 1932, Senator Hugo Black conducted a sweeping investigation of airmail contracting and exposed the entire shameful situation to public view. In the uproar which followed, Roosevelt ordered all mail contracts cancelled and called upon the Army to resume carrying the mail. The Army responded, but it was unprepared and poorly equipped; in the first week 12 pilots died and 6 more were seriously injured. The Army's mail service this time lasted only a few months (at an average cost per mile of $2.21 vs. 54¢ for the airlines). In the Airmail Act of 1934, competitive bidding was restored, but as a result of the previous scandals, aircraft manufacturers were forced to sell their airline operations. Thus with one blow, the government destroyed the three largest aviation companies in the country.

A further consequence of the airmail scandals was the Civil Aeronautics Act of 1936, sponsored by Senator Pat McCarran (another hero of the "conservatives"). Beginning in 1934, Sen. McCarran began a legislative campaign for economic regulation of scheduled air carriers. In 1935 a federal study group recommended treating air transport as a public utility, with subsidies and fare regulation. Meanwhile, with the resumption of competitive bidding for airmail contracts, and with the Depression rolling along, many airlines lost money, and began looking to Washington for help. The newly-formed Air Transport Association began lobbying for federal regulation and subsidy, in effect threatening that if the airlines didn't have more money available, they couldn't guarantee safe operation (1). This argument apparently worried FDR, who didn't want the New Deal blamed for a wave of air crashes.

The resulting Civil Aeronautics Act "gave the airlines almost all they desired". It provided blank-check subsidy, eliminating competitive bidding on airmail contracts (substituting "need" as the criterion), and protected against competition the routes of existing airlines. The major airlines welcomed passage of the new law; even staunch "free-enterpriser" Eddie Rickenbacker supported it. In addition to these provisions, the Act set up an independent agency known as the Civil Aeronautics Authority to carry out the regulation of the industry. Two years later the agency was split in two, with the Civil Aeronautics Board (CAB) performing economic regulation and the Civil Aeronautics Administration (CAA) responsible for safety and air traffic control. Except for the CAA being renamed the FAA in 1958, and becoming a part of the Transportation Department in 1966, the government's regulatory structures have remained essentially as they were in 1940.

There is one further incident in the history of aviation that deserves mention, because it illustrates the nature of the effects of the CAB on competition. At the close of World War II a number of entrepreneurs purchased surplus transport planes in order to start new airlines. Since the established airlines had monopolies on the most profitable routes, the new-comers were legally forbidden to compete with them — as scheduled carriers. But the CAB exempted non-scheduled cargo and coach service from the "certification" (monopoly-granting) procedures, as well as from subsidy. Thus, the new-comers, with their own money, began non-scheduled cargo and coach flights, the latter service an unheard-of innovation in the industry.

The scheduled lines, free-enterprisers all, attacked the concept of coach flights as "economically unsound" and implored the CAB to put the non-skeds out of business. But coach service proved to be so popular with customers that the scheduled lines soon began to offer it themselves, undercutting their own arguments. Even so, the CAB began putting pressure on the non-skeds, who then asked Congress for an investigation to determine the full extent of federal subsidies received by the "incumbents". The scheduled airlines, through their lobbying groups, the ATA, conducted a massive campaign against the non-skeds, charging that they "were making no public contribution and constituted a drain and diversion of needed revenue from the scheduled carriers".7 Eventually, this type of propaganda was successful; the CAB adopted regulations which put the non-skeds out of business.

Suggested solutions, their flaws, and the proper solution

That a crisis in aviation is impending is widely acknowledged; aviation and aerospace publications have been rife with analysis and recommendations for several years. Now newspapers and newsmagazines are beginning to pick up the story, alerted by growing flight delays, air controller slowdowns, and hopelessly congested airports. And so there is no dearth of proposed solutions. In evaluating these proposals, however, it is vital to keep one point clearly in mind: the essential nature of the problem is not technological or political, but economic and anti-political. As with any other case of government intervention, the normal relationships between supply and demand have been grossly distorted with the result that, on the one hand massive needs (electronic "area navigation", larger and more modern airports) are being ignored, while on the other hand the present consumers of airline service are not paying anything like the full costs of the service they are getting. For this reason, any solution that deals with only political or technological improvements is actually dealing with effects, rather than causes.

The government's short-term approach will be some variation of the "user tax" plan developed by the Administration. Under this plan, additional taxes will be levied on tickets, a new tax levied on air freight, and fuel for private planes taxed. About half of the money raised by these taxes (i.e. $5 billion over 10 years) will be earmarked exclusively for airports and airways
improvements, with the remainder going into "general revenue". According to Transportation Dept. projections, some $14 billion is needed for airport and airways modernization over the next ten years — thus, the remaining $9 billion would have to come from Congress and/or local communities.

The only real merit of the user-tax proposal is that it gives token recognition to the fact that the users are not currently paying the full costs of the service they are receiving. But it does this in so minimal a way as to be almost worthless. It still leaves all essential funding decisions to be made politically, with the result that millions of taxpayers will still be forced to pay most of the costs, for the benefit of a few. Since the plan doesn't identify the principle of full-cost pricing vs. indirect subsidies, it is easy for vested interests to attack it as costing them more than they are accustomed to (The Air Transport Association and the Airline Owners and Pilot's Association have already done just that). In addition, the proposal makes the error of assuming that simply providing more money is the answer to all the problems, without ever questioning whether the government's bureaucracies might themselves be part of the problem.

A proposal which does raise this question was made last December by Glen A. Gilbert, aviation consultant and one of the originators of the existing Air Traffic Control (ATC) system. After many years of experience in aviation, both in government and industry, Mr. Gilbert has concluded that the FAA's structure and policies are not conducive to continuing progress in developing and implementing advanced-technology systems. He proposes that the FAA get out of the airways business altogether, in favor of a COMSAT-type corporation financed directly by the users, based on the actual costs of the service provided. This idea, predictably, has received little publicity outside of aviation circles. It is certain to be opposed by the same organizations and interests that oppose the user-charge taxes.

Probably the most popularized approach of 1969 is to call for a "total systems approach" to the entire airport/airways/airline/ground transportation problem. It is difficult to argue with this approach, per se, since all it really says is that a complex problem is not likely to be solved by piecemeal solutions considered in isolation from the total system. Yet, what most proponents of this approach end up calling for is merely more of the same — more "federal spending" and more government regulations. A genuine systems approach must look beyond conventionally perceived boundaries of the problem, and determine to what extent the established order (the FAA, the CAB, and the special-interest groups) may be the cause of the problem.

Political control of airports, airways, and airlines prevents the normal market mechanism from operating. It is impossible to determine the true demand for air navigation service, since the users, the airlines and general aviation, do not pay for it. Airport construction lags traffic growth by a decade — because taxpayers and traffic are very different people. Hundreds of short-haul transport aircraft crowd airports and airways, aircraft whose average passenger load is too small to be profitable and whose owners would be long-since bankrupt, but for 22 years of subsidy at public expense.

If the present system is collapsing, and increased government intervention does not attack the core of the problem, what then is the answer? The basic economic problem cannot be solved by legislative fiat — if supply and demand are distorted by arbitrary regulations, they cannot be forced back to normal, since "normal" means what supply and demand would be free of force. What the government must do is to get out of the way and let the market mechanism take over. Since men are volitional beings, it is impossible to spell out in advance exactly how, free, they would solve these (or any other) problems. Nonetheless, it is possible to set forth the principles that apply in this case and draw some logical conclusions from them.

The first principle is that everything which is of value to someone has a market value, which the objective forces of the free market can and do (and should) determine. Any violation of this principle (by subsidy, "free" services, coercive barriers to entry and exit, or enforced price-fixing) distorts the market process and unjustly benefits some by the coerced sacrifice of others. The second principle is that the proper role of government in a capitalist society is to protect rights, in this case, property rights. It is impossible for men to peaceably conduct business unless there is a set of objective ground-rules which define what constitutes particular types of property, how such rights are originally acquired, and how the right is to be legally pro-
tected. By misunderstanding this crucial principle, modern legal theory has applied the ancient concept of "public ownership" of such uniquely twentieth-century property as radio and TV frequencies and air routes.

Under capitalism, airports would be private businesses, operated for profit, deriving revenues directly from customers (airlines, individual airplane owners, passengers, concessionaires, etc.) Such an airport would be free to float bonds and to sell stock (as does Madison Square Garden) in order to raise capital. In order to remain profitable, the airport's management would have a strong incentive to plan for the future, developing the same type of forecasting expertise possessed by aircraft manufacturers and airlines. Such planning would probably include the acquisition of large amounts of surrounding land, both for expansion and as a noise buffer zone. In some cases, it might prove economical to build the airport offshore, either as a floating platform or as an artificial island.

The airport management would be free to make whatever contracts it could with the various airlines which would compete for terminal space and landing privileges. In the interest of attracting the largest number of passengers, the airport company would seek the most competent airlines in terms of quality and quantity of service. At the same time, by means of those individual contracts, the airport company could control arrival and departure times to prevent rush-hour congestion of runways. To assure customers of convenient access to the airport, it would be in the company's interest to cooperate with local high-speed transit companies in planning and building airport access links.

It is quite likely that airline customers using such airports would pay more for their trip than they do now. Without the power of "eminent domain", the airport company would have to acquire land at full value, rather than by condemnation and coercion; in addition it would have to bear full legal liability for accidents and noise, like any other business. And, of course, without access to tax money, it would be unable to force the local citizenry to make up any operating losses. On the other hand, the customers, while paying their way, would enjoy the benefits of well-planned, low-congestion terminals, rational scheduling, on-time operation, a wider choice of

(continues on p. 16)
DO YOU KNOW ANYONE WHO DOESN'T CLAIM THAT THE STATE OF THE WORLD IS IN A MESS? MANY HAVE SOLUTIONS FOR IT. BAN THE BOMB. LOVE NOT WAR. LEGALIZE LSD. PRAYERS. SACRIFICE FOR EVERYONE ELSE'S WANTS AND NEEDS. ETC. ETC. ETC. SOLUTIONS THAT ARE LIKE TRYING TO PUT OUT A FIRE BY FANNING IT OR BY ONLY FIGHTING THE SMOKE. IGNORING THAT PROBLEMS HAVE TO BE CORRECTED AT THEIR SOURCE. NATIONS, RACES AND GROUPS DON'T CAUSE PROBLEMS. INDIVIDUALS CAUSE PROBLEMS. THE WORLD ISN'T IN A MESS. PEOPLE ARE IN A MESS. THE STATE OF THE WORLD IS JUST THE DEMONSTRATIVE, PROVEABLE EFFECT OF THE DEGREE TO WHICH MAN HAS REFUSED TO ALLOW HIMSELF TO KNOW WHAT IS RIGHT AND TO ACT IN THE MANNER PROPER FOR MAN. MAN WHO IS DEFINED AS A RATIONAL BEING—CHOOSES TO ACT ON HIS OWN BEHALF AS AN IRRATIONAL BEING!

IT IS HERE, AT THE SOURCE, ONE BEGINS TO CLEAR UP THE "WORLD'S MESS." HERE WITH "MAN," WITH A SINGLE PERSON—WITH ONESELF!

INFLATION IN WEST MAY CAUSE BONN REVALUATION TO SPARK STRIKES

FRANKFURT, West Germany, Sept. 3 (Reuters)—West German workers began a series of strikes yesterday against the government's plan to revalue the Mark. The strikes were called to coincide with the announcement of the government's decision to revalue the Mark by 15 percent.

ROMANS BURN EFFIGIES TO SPARK STRIKES

BONN, West Germany, Sept. 3—Riots broke out in the West German city of Bonn yesterday as workers demonstrated against the government's decision to revalue the Mark.

NO, IT WASN'T AN ACCIDENT! THE STATE IM'M IN WAS CAUSED AND THERE'S A LOT OF PEOPLE WORKING HARD KNOWINGLY AND UNKNOWINGLY TO MAKE SURE MY CONDITION GETS WORSE! I'LL SHOW YOU SOME TYPES OF PEOPLE AND THE STUPIDITY THEY PRACTICE THAT ALWAYS LEADS TO MORE MISERY!

ROMANIAN RAPS INVASION, WILL FORM DEFENSE MILITIA

BUCHAREST, Aug. 21 (UPI)—President Nicolae Ceausescu of Romania condemned the Soviet occupation of Czechoslovakia today as a "big mistake" and told a cheering crowd that he would organize people's militia units to defend the security of his own country.

VATICAN CALLS CRITICISM NAZI-LIKE

Rome, Aug. 21—(AP)—Some of the leaders of the Roman Catholic Church, meeting at the Vatican today, praised President Richard Nixon of the United States, President Indira Gandhi of India, and Prime Minister Pierre Trudeau of Canada as "men of peace." They also condemned the activities of the Nazi regime in World War II, calling them "an embarrassment to the world."
THE NEUTRALIST!

NO! I WON'T STAND UP FOR OR BE AGAINST EITHER SIDE! ACCORDING TO MY SCALES, I DON'T SEE ANY DIFFERENCE BETWEEN TWO EXTREMES! IT'S NOT UP TO ME TO JUDGE WHICH SIDE IS RIGHT OR WRONG; YOU CAN FIGHT AMONG YOURSELVES I'M NEUTRAL! IT DOESN'T AFFECT ME NO MATTER WHICH SIDE HAS ITS WAY!

NEUTRAL: NOT TAKING PART IN EITHER SIDE OF A QUARREL & NOT TAKING PART IN A WAR; GIVING NO ACTIVE AID TO ANY DILIGERENT 2. OR BELONGING TO OR CHARACTERISTIC OF A NATION NOT TAKING PART IN A WAR 3. BELONGING TO NEITHER OF TWO CLASSES IN A MIDDLE POSITION BETWEEN TWO EXTREMES: NOT ONE THING OR THE OTHER; INDIFFERENT. WEBSTER'S NEW WORLD DICTIONARY
SORRY, I REFUSE TO RECOGNIZE YOU AS BEING A VICTIM OF AN INJUSTICE!

SORRY, I REFUSE TO RECOGNIZE YOU AS A BRUTAL AGGRESSOR OR CONDEMN YOUR ATROCITIES!

JUSTICE OR INJUSTICE?? WHO AM I TO JUDGE AND WHY SHOULD I WANT TO SEE ANY DIFFERENCE BETWEEN THEM?? RIGHT?? WRONG?? WHAT'S THAT??

WHY SHOULD IT MATTER IF PEOPLE ARE ENSLAVED BY A BLOODY DICTATOR OR GOVERNED BY OBJECTIVE LAWS, RECOGNIZING AND PROTECTING INDIVIDUAL RIGHTS?

SORRY, EVEN IF YOU DO HAVE REASON ON YOUR SIDE AND CAN LOGICALLY PROVE YOUR STATEMENTS, I'M NEUTRAL! I WON'T ACCEPT THEM AS KNOWLEDGE OR AS TRUTHS!

A IS A!

REALITY

LOGIC

REASON

PHILOS

SC

SORRY, EVEN IF YOU CAN'T PROVE YOUR CLAIMS, I'M NEUTRAL! I WON'T REJECT THEM AS NOT BEING VALID KNOWLEDGE OR NOT BEING TRUE!

'AS K. BLESSIT

A IS X OR 2 DEPENDING

IT'S ALL ARBITRARY!

IN FACING UP TO ISSUES....

FOR...OUR...AGAINST!

...COUNT ME OUT!

WE NEUTRALS ARE THE ONLY ONES WHO DON'T CAUSE TROUBLE!

OUR WAY IS THE ONLY WAY TO PEACE AND HAPPINESS!

BUT A NEUTRAL, BY HIS EVASION OF A STAND, TELLS THE EVIL THAT EVIL IS FREE TO PURSUE ITS DESTRUCTIVE WAYS AND IT NEED NOT WORRY ABOUT BEING JUDGED, CONDEMNED OR OP Pressed AND HE TELLS THE VICTIMS AND THE GOOD THAT THEY WILL NOT RECEIVE ANY SYMPATHY OR SUPPORT BY THE NEUTRALIST'S POLICY—WHO IS PENALIZED AND WHO IS AIDED??
Watts Tension Eases; Police Reduce Patrols

In Mexico
Troops Rout Protest Camp
300 Seize College Building in Los Angeles

Vandals Go Wild Again at School

THE BELLIGERENT PROTESTER!

New York Daily News

CHAOS ON CAMPUS: REVOLT GROWS

Student Rebels Disrupt

Protesters Map Chaos, Ill.

National Guard Called

27 Held in Chicago Melee

Hippies Disrupt TV Show

MEXICAN STUDENTS RIOT

3 Dead in Mexico Riot

Witnesses Heard on Police Brutality

Police Battle Miami Rioters

4th Riot Battle in Heart of Miami

Englewood Awaits Replies

Claims Cops Violated His Civil Rights

Miami Police Open Fire on Rioting Mobs

Los Angeles (AP) — Brown Reporters

MILITARY'S INVASION PARALYZES CAMPUS

San Francisco: The Menace continues daily as police and National Guardsmen continue their efforts to end the riot. The event that began with the arrest of 18 students has now spread across the country. Students in Chicago, New York, and Philadelphia have taken to the streets in protest. The National Guard was called in to maintain order.

The Belligerent Protester!

I HAVE THE RIGHT LIKE EVERYONE ELSE TO DO WHAT I WANT BUT THAT'S NOT ENOUGH!

I WANT SPECIAL RIGHTS THE "RIGHT" TO STOP OTHERS FROM EXERCISING THEIR RIGHTS!

AND I DEMAND THAT OTHERS RESPECT MY "RIGHTS TO VIOLATE THEIR PROPER RIGHTS!"

---

3 Dead in Mexico Riot

Witnesses Heard on Police Brutality

Miami Police Open Fire on Rioting Mobs

Los Angeles (AP) — Brown Reporters

MILITARY'S INVASION PARALYZES CAMPUS

San Francisco: The Menace continues daily as police and National Guardsmen continue their efforts to end the riot. The event that began with the arrest of 18 students has now spread across the country. Students in Chicago, New York, and Philadelphia have taken to the streets in protest. The National Guard was called in to maintain order.

The Belligerent Protester!

I HAVE THE RIGHT LIKE EVERYONE ELSE TO DO WHAT I WANT BUT THAT'S NOT ENOUGH!

I WANT SPECIAL RIGHTS THE "RIGHT" TO STOP OTHERS FROM EXERCISING THEIR RIGHTS!

AND I DEMAND THAT OTHERS RESPECT MY "RIGHTS TO VIOLATE THEIR PROPER RIGHTS!"
THE NEO-NEUTRALIST.... SELECTIVITY, THE RULE!

Man's rights come from the state, society, God. By vote! They can be taken away!

We're neutral as far as this side is concerned!

The inalienable right to life, liberty and the pursuit of happiness...

No one has a right to violate the rights of others! The law-abiding citizens must be protected!

Separation of economics, government force.

Whatever I'm able to achieve will be long to me but it's up to me to achieve it! There's no guarantee that I can or will achieve anything!

Job! Position! Career! Success! Security!

Someone gives me, someone owes me.

No one cares about or helps me! So how can a guy do anything or be anything but miserable in life?

Poor victims of greed, environment of a cruel, evil world!

Selfish! Greedy! Inhuman!

Sure I'm happy! I'm struggling but I'm earning my success! I'm enjoying my ability to learn and do more in life! Why hold myself back??
THE NEUTRALIST SETTLES A DISPUTE!
OR
TO BE RIGHT IS TO BE A LOSER!
WHY SHOULD I WORK TO SUPPORT MYSELF? I DIDN'T ASK TO BE BORN! THE WORLD OWES ME A LIVING!

YOU GAVE US YOUR TIME AND YOUR SKILLS, WE GIVE YOU A SALARY IN EXCHANGE! SOMETHING FOR SOMETHING!

* SUBSTITUTE: GOVERNMENT COMMUNITY FAMILY EVERYONE BUT MYSELF

WHEN YOU TELL ME TO GIVE YOU MONEY, YOU'RE TELLING ME TO GOVERNMENT COMMUNITY FAMILY EVERYONE BUT MYSELF.

I DONT HAVE ANY MONEY--HE DOES!

I SAID GIVE ME!

HERE NOW, THERE'S NOTHING WORTH FIGHTING OVER OR TO BE GAINED BY BEING SO ONE-SIDED!

HE'S TRYING TO STEAL MY MONEY!

OOOH! THEY SAY THAT'S WRONG!

WAIT A MINUTE! THERE'S TWO SIDES TO EVERY STORY!

I DON'T HAVE ANY MONEY--HE DOES!

NO! YOU HAVE NO RIGHT TO IT!

I SAID GIVE ME!

HERE NOW, THERE'S NOTHING WORTH FIGHTING OVER OR TO BE GAINED BY BEING SO ONE-SIDED!

HE'S TRYING TO STEAL MY MONEY!

OOOH! THEY SAY THAT'S WRONG!

WAIT A MINUTE! THERE'S TWO SIDES TO EVERY STORY!

I DONT HAVE ANY MONEY--HE DOES!

I SAID GIVE ME!

HERE NOW, THERE'S NOTHING WORTH FIGHTING OVER OR TO BE GAINED BY BEING SO ONE-SIDED!

HE'S TRYING TO STEAL MY MONEY!

OOOH! THEY SAY THAT'S WRONG!

WAIT A MINUTE! THERE'S TWO SIDES TO EVERY STORY!

I DON'T HAVE ANY MONEY--HE DOES!

I SAID GIVE ME!

HERE NOW, THERE'S NOTHING WORTH FIGHTING OVER OR TO BE GAINED BY BEING SO ONE-SIDED!

HE'S TRYING TO STEAL MY MONEY!

OOOH! THEY SAY THAT'S WRONG!

WAIT A MINUTE! THERE'S TWO SIDES TO EVERY STORY!

I DONT HAVE ANY MONEY--HE DOES!

I SAID GIVE ME!

HERE NOW, THERE'S NOTHING WORTH FIGHTING OVER OR TO BE GAINED BY BEING SO ONE-SIDED!

HE'S TRYING TO STEAL MY MONEY!

OOOH! THEY SAY THAT'S WRONG!

WAIT A MINUTE! THERE'S TWO SIDES TO EVERY STORY!

I DONT HAVE ANY MONEY--HE DOES!

I SAID GIVE ME!

HERE NOW, THERE'S NOTHING WORTH FIGHTING OVER OR TO BE GAINED BY BEING SO ONE-SIDED!

HE'S TRYING TO STEAL MY MONEY!

OOOH! THEY SAY THAT'S WRONG!

WAIT A MINUTE! THERE'S TWO SIDES TO EVERY STORY!

I DONT HAVE ANY MONEY--HE DOES!

I SAID GIVE ME!

HERE NOW, THERE'S NOTHING WORTH FIGHTING OVER OR TO BE GAINED BY BEING SO ONE-SIDED!

HE'S TRYING TO STEAL MY MONEY!

OOOH! THEY SAY THAT'S WRONG!

WAIT A MINUTE! THERE'S TWO SIDES TO EVERY STORY!
Hmm! Since they say there's two sides to every issue, that has to mean both sides are partly right! So I can't leave this as it was before you met, or settle it in favor of just one party!

Yeah! Let's compromise! That's fair all around!

...And you're guilty of being a greedy, selfish, self-promoting go-getter! That's a sin!

Now, now, I represent the ruling power, true equality for all, based on the feelings and needs of the majority, the consensus, the popular opinion...something for everyone, no extremes! We'll all meet in the middle of the road on the common ground of public good!

After all, we all have to sacrifice something, but this way, no one loses everything, and besides, who's to judge what's right or wrong? No one's more contemptible than anyone else. A person would have to be a monster to think otherwise!

For your part of the compromise, I take half of your earned money away from you!

But no one has the right to take any of my property, not even you...it's wrong!

Why are you so hostile when I'm doing this for your own good, to protect you? It can't be wrong if we take something from someone, or force people to do things when it's for the good of all people, for society, because if it's for the good of society, it has to be good for you. You may have to sacrifice a little now, but you'll make it up when others are forced to sacrifice for the good of society, for you.

* Your money your property your life

Now later eventually
NOW I GIVE THE HALF OF YOUR MONEY TO THIS MAN, WHO WANTS AND NEEDS IT!

THAT'S FAIR!

NOW FOR YOUR PART OF THE COMPROMISE, YOU MUST PROMISE NOT TO TRY TO ROB THIS MAN AGAIN!

Promise that... for only half his money? Alright, but just to prove I'm willing to sacrifice for the common good, for society!

YOU HAD TO SETTLE FOR ONLY HALF OF WHAT YOU WANTED, AND YOU DON'T HAVE TO WORRY ABOUT BEING ROBBED!

NEXT TIME I'LL GOING TO HOLD OUT FOR 3/4'S OF THE MONEY!

SEE, EVERYONE SACRIFICED A LITTLE AND GAINED A LITTLE, BUT NO ONE LOST EVERYTHING. WHAT COULD BE MORE FAIR?

THANKS TO MY "PROTECTOR", I'M OUT HALF MY EARNINGS, AND WHAT'S A PROMISE FROM A THIEF WORTH?

EVERY PROBLEM CAN BE SOLVED, WITH EQUAL JUSTICE FOR ALL, BY THE SIMPLE COMPROMISE!

Don't forget the rest of the world!

WE'RE ALSO "HAVE-NOTS"! WE HAVE NEEDS, TOO! HE WAS MADE TO GIVE ONCE, HE HAS TO BE MADE TO GIVE AGAIN, AND AGAIN AND AGAIN AND AGAIN... AGAIN.
SO DON'T BE SELFISH, COMPROMISE! GIVE UP THE GOOD TO THE EVIL AND YOU'LL GAIN PEACE AND HAPPINESS!

WE'RE ONLY ASKING YOU TO COMPROMISE PART OF YOUR RIGHTS AWAY—JUST YOUR PROPERTY—YOU'LL STILL HAVE YOUR LIFE!

WE'LL COMPROMISE! WE'LL TAKE YOUR CAPITALIST MONEY AND AID TO BUILD UP OUR SOCIALIST AND DICTATOR REGIMES!

WE'LL COMPROMISE! WE'LL ACCEPT THE SINFUL WEALTH CREATED BY GODLESS REASON AND INDUSTRY AND USE IT TO SUPPORT OUR HOLY FAITH AND TO ATTACK YOU FOR CONTINUALLY LIFTING MAN'S STANDARD OF LIVING HIGHER AND HIGHER!

A CRIMINAL HAS RIGHTS! IT'S NOT HIS CRIME. IT'S SOCIETY'S! HE'S AS GOOD AS ANY LAW-BIDDING CITIZEN AND DESERVES MORE CONSIDERATION THAN HIS VICTIMS!

WE ALL KNOW NO ONE CARES FOR PEOPLE MORE THAN A BLOODY DICTATOR! SO LET'S GET TOGETHER WITH THEM IN A WORLD PEACE ORGANIZATION! A U.N. TO ASSURE EVERY MAN'S RIGHTS WILL BE FULLY PROTECTED!

IT'S YOUR FAULT WE'RE A BACKWARD NATION! YOU SHOULD FEEL GUILTY AND ASHAMED OF YOUR PROSPERITY! COMPROMISE! MAKE US A MODERN NATION ON OUR TERMS!

LET US ENslave ONLY HALF YOUR COUNTRY...

TO CAUSE A DEATH OF ONE MAN IS A CRIME AND PUNISHABLE. BUT TO CAUSE THE DEATHS OF THOUSANDS OR MILLIONS IS A DICTATOR'S PRIVATE BUSINESS AND NOT TO BE JUDGED!

WHEN WILL IT END?? FOR YOU, WHEN YOU REFUSE TO BECOME A WILLING VICTIM OF INJUSTICE AND UPHOLD THE FACT THAT ON BASIC PRINCIPLES.... THERE CAN BE NO COMPROMISE!
services, and probably greater safety due to the airport's full-liability status.

As far as air traffic control is concerned, the basic concept of an ATC "utility" has already been presented. The only flaw in the existing proposals is the automatic assumption of a non-profit or quasi-governmental status for such a company. If AT&T can provide high-quality telephone service at low rates, while making a healthy profit, why couldn't the same be true of an ATC company? Interestingly, the existing ATC system was begun by a private company formed by the airlines back in the thirties. When the federal government took over control of the skies, it inherited a functioning system, including en-route nav aids and control towers.

The largest single benefit of a privately-owned ATC system is that sufficient funding and motivation would be available to implement up-to-date electronic navigation techniques. Much of today's air traffic congestion results from the FAA's requirement that airplanes fly exclusively over the limited number of paths linking VOR ground stations (nav aids). For nearly two decades, on-board computers and pictorial displays have been available, which, when installed in an aircraft, permit the pilot to define a new path, not restricted to the old station-to-station ones. This technique, known as area navigation, has the potential of increasing the amount of navigable airspace by orders of magnitude, as well as substantially reducing air traffic controller workload (since the pilot does most of his own controlling). After years of lethargy and indifference, the FAA this summer finally began allowing limited experimental usage of area navigation, but only under the threat of total saturation of the existing airways.

This bureaucratic stagnation is typical of the FAA. As airline pilot Vernon Lowell relates, "the inflexibility of these [FAA] regulations...is the bane of every pilot's existence." Furthermore, once it has chosen a wrong policy (such as opposing area navigation) the FAA is loath to admit its error. Since protecting its political existence, rather than providing profitable service, is its standard, "the FAA has degenerated into a bureaucracy which oftentimes engages in face-saving of its public image rather than the pursuit of air safety." In attempting to obtain ATC services "for free" the airlines have paid the price in the form of a bureaucratic nightmare of flight rules that compromise safety. The FAA's "endless flow of rules forces pilots into a conflict: fly legally but less safe, or violate the rules and fly safer," 11

Once again, breaking he link between supply and demand has produced a situation in which nobody wins. A profit-making ATC company is today completely feasible, technically and economically. The airlines and other users would have to pay for the services they received, but because of this they could demand — and receive — the latest innovations that advanced electronics and computer technology could provide. As a result they could expect an unprecedented increase in capacity and safety of the airways.

With airports privately run, and airways privately defined, what would the position of airline companies with regard to free access to specific airspace? The crucial question here is the proper definition of the property rights to an air route. Because two aircraft cannot fly over the same airway in the same place, at the same time, and because the number of airways, though large, is ultimately limited, it is clear that individual airways constitute a class of property and ought to be protected as such. As Ayn Rand points out in "The Property Status of Airwaves," 12 the right of ownership (to any kind of property, be it a radio frequency, an airway, or a gold mine) belongs to whomever first applies his knowledge and effort to make use of it. As technology develops in ever-increasing variety of property, it is the government's task to "formulate the laws by which...[to this property] are to be implemented and adjudicated." 13 Thus, in the case of airways, the first person or company to make the effort of flying a particular air route has the first claim on it, i.e. his right to use it has priority over anyone else's. The specific details of this right — the dimensions of an airway, the time or distance between successive users, etc. — are a function of the level of technology at a particular point in time. These are matters which would be worked out when formulating — and periodically revising — the laws and contracts dealing with airway property rights. The air traffic control companies would offer their services as a means of enabling all users, through the expedient of knowing exactly where they are flying, to comply to airway laws and contracts.

The other important issue concerns which airlines would serve which cities. The advocates of government control claim that under laissez-faire every airline would attempt to serve every city, with the result that all (or most) would go bankrupt. When challenged on the absurdity of this assumption, they usually give as an alternative, their fear that the airlines would form a huge cartel, dividing up the markets among them, and fixing the prices. This is, of course, precisely what the CAB presently forces them to do.

As pointed out earlier, it is impossible to predict exactly what would happen in a free market for air service. But because of the competition for the limited airport space, the number of airlines, or more precisely, the number of planes, serving a particular city-port would probably be limited (though in many cases, more than at present). The important point to remember is that the market, rather than politicians, would be allocating the routes and the difference that would make could mean significant improvements in service. (In the early '50s Eastern Airlines asked the CAB for permission to link Florida and California — a market not then served. For a number of years the CAB held hearings, hearing mountains of inconclusive testimony from various city governments and airlines; eventually the route was awarded to National Airlines on the basis of its "need" for it. Thus, Eastern, with three times as many planes, was completely frozen out. Examples such as this dot the history of the CAB). The CAB's policies prevent greater service on many profitable routes, and force excess service on many marginally-profitable or loss-producing routes. In the free market, the quantity and quality of service to or from any city would bear a direct relationship to the demand for service, as reflected in the prices people were willing to pay.

Thus, unrestricted competition, far from causing chaos, would promote orderly, harmonious growth in air service, with everyone paying his own way. It is certainly possible that some cartel-type agreements would be attempted — this is a possibility in any free market. But as in any other market, neither technology nor competition stands still; no price can be fixed at a highly profitable level for very long (except by the government) without attracting competition. The unrestricted operation of supply and demand provides real-time feedback of information to both consumers (via prices) and producers (via profits) about the state of the market.
When liberated from the distortion of government intervention, the market mechanism will provide whatever air services people — as individuals, rather than as special-interest groups — are willing to pay for.

Steps toward freedom and order
If the administration became convinced that government was the cause of the aviation crisis, there are three specific steps it could take, by way of decontrolling. The highest priority should be given to selling the FAA's air traffic control system to the highest bidder (the proceeds to be added to income tax refunds). The new owners, after a transition period in which to raise capital, could get on with a crash program to implement electronic area navigation. As soon as the changeover were complete, they would begin charging all users for their services.

Once area navigation was operational, and the air congestion crisis over, the government's next step would be to cancel the Federal Aid to Airports (FAAP) program. This would leave municipalities with the alternatives of greatly increasing local taxes (very unlikely) or selling the airports to private companies. Those cities which did neither would probably soon find their obsolescing airport competing with newly-built or newly-acquired privately owned and operated airports (Howard Hughes is already acquiring land for an SST-port in Nevada, and design firms have designed a number of offshore airport concepts, suitable for such cities as Los Angeles, New York, Chicago, and Cleveland.)

The government's third step would be to abolish the CAB. Not a single one of the CAB's functions is justifiable in a free society; none is without harmful economic consequences. Abolishing the CAB would immediately end millions of dollars of subsidies to smaller airlines, probably causing a number of mergers and acquisitions and failures. At the same time, with the elimination of route "certificates", all air routes would be opened to competition. The airlines would be free to negotiate with all airport owners (private and government) and much new service would be made available in short order (and could be easily accommodated via area navigation). At the same time, the government would be obliged to promulgate an air route property law, precisely defining the means of establishing and enforcing usage priority for individual airways.

These steps, to be sure, would be vociferously opposed by the multitude of vested interests and their lobbyists, which have proliferated in response to the government's policies. Such craven individuals and organizations, the embodiment of status quo and special privilege, are the natural result of the attempt to substitute politics for economics, fascism for freedom, "pull" for trade. It will take men of integrity, in business and in government, to stand up to these men and answer their pleadings of "need" and "public interest" with reason and economics. Such men of integrity are essential if aviation (along with our nation) is to escape the stagnation which is the end result of government control.

Robert Poole is a systems analyst with a large aerospace firm. His work has brought him in contact with FAA and CAB regulations. He holds both a BS and an MS in engineering from MIT.

After receiving Mr. Poole's article in August, we asked him to produce a series of mini-essays, intended to serve the function of supplementary notes. In the case of technological solutions, it should be noted, as was it in the main article, that these solutions could be effectively applied only after the political difficulties have been overcome. The paragraph on the cost of ATC delays is included to give a partial indication of the amount of money airlines might be willing to invest in a good ATC system, in order to reduce these costs.

Technological solutions
Airports. The airports' biggest problem is limited landing capacity. While relatively easy to build larger and more efficient buildings (especially since they are often financed by the individual airlines), it is difficult to expand the capacity of exiting runways without violating a multitude of FAA regulations. Of course, most of these regulations make sense from a safety standpoint, given the existing ATC system, radar, and electronics. But because the regulations are so detailed and procedural (i.e., concerned with methods rather than results), they have become an end in themselves, and tend to seriously inhibit the creative application of modern technology to solve the capacity problem.

Assuming, however, that the FAA regulations were either reoriented toward results, or were eliminated altogether, what could be done to increase runway landing capacity? As any student of traffic flow knows, maximum efficiency requires that all vehicles in a queue move at the same speed. Currently, small private and commuter planes, with much slower landing speeds, use the same runways and approach patterns as the big jets. As a result, separation distances between planes must be greatly increased, resulting in far fewer landings per hour. The solution is to set a single approach speed for large jet-size runways and restrict their use to those aircraft capable of maintaining that speed. Slower aircraft, which require much shorter, lower-strength runways anyway, could be accommodated on a smaller, parallel runway, again restricted to a single landing speed. The slower planes would also follow a separate holding and landing pattern, so as not to interfere with the incoming jets.

The loading capacity of the jet-size runways could also be increased by constructing high-speed runways at various intervals, so that jets wouldn't have to slow to a crawl before leaving the runway, thereby allowing other planes to land that much sooner. A third way to increase capacity would be to provide the ground and airborne equipment required for fully-automatic "zero-zero" (Category III) landings. In this way, runway capacity could remain at its maximum level regardless of the weather. (Several European airports

(Cont. on p.20)
Introducing the Great Breakaway. (For our great introductory offer, see the next page.)
Please enter □ renew □ my subscription to REASON. Please find enclosed:
$2 for one year □
$7 for two years □
$12 for three years □

Name

Address

City    State

Zip

Please send complimentary copies to the following people:

Name

Address

City    State

Zip

This complimentary copy sent by request of:

Name

Address

City    State

Zip

Please send gift subscriptions to the following people:

Name

Address

City    State

Zip

sign gift card:

This complimentary copy sent by request of:

Note: Introductory price of $2, applicable to both new customers and current subscribers, expires November first. Beyond that date, all money received will be pro-rated.

Fold into thirds, seal well, and mail

Business Reply Mail

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

First Class Permit No. 42151
Brighton, Mass.

Postage will be paid by

reason

42 Euston Rd.
Brighton, Mass. 02135
DARLENE BRIDGE PRESENTS:

PLAYS MOVIES SPECIALS

If you go to the theatre to see material which deals with its characters justly, has a theme worth saying, and is entertaining, you will enjoy these productions.

At the House of Sausage, 529 Powell.............. Write or call Darlene Bridge, 1429 Sacramento, San Francisco, Ca 94109
tel: 415-775-5571

“QUESTION”

When she grunts you her smile, Do you know what that means?
If she gives you that laugh, Does it echo in dreams?
Can you see how straight That young maiden stands?
Are you the hero That small frame demands?

Then why do you wait? Why this delay?
Take her, young man — Are your feet made of clay?

By Darlene Bridge

This poem appeared in the first issue (July, 1969) of a new monthly magazine, the Arbiter

The Arbiter also contains top flight fiction - incisive articles - book & movie reviews. For a free copy of our promotional issue write

Van Dyke Enterprises 254 Redwood Road San Anselmo, Ca 94960

Subscription rates: in U.S., $4.50 per year, foreign countries, $5.00 per year. Special trial subscription: 6 months for $2.25 (U.S.A. only).

are equipped for Cat. III landings and British European Airways regularly lands its Trident jets automatically.

Airways. The basic limitation of the airways are two: limited physical capacity (spacing) and limited communications capacity. Several state-of-the-art improvements could practically eliminate these problems. The existing system depends on ground-based radar to tell the FAA controllers the range and bearing of all aircraft in the vicinity of each air traffic control center (a nationwide network of control centers covers the U. S.). The controller visually monitors the position of a large number of planes on his radar scope and gives each pilot a large amount of verbal instruction via radio. Hence, much of the controller’s time is taken up in talking over the radio, reducing his effectiveness and wasting vast amounts of radio time. Most of this information is of a routine nature and could easily be transmitted in digital form via a “data link”; output in the cockpit could be some combination of lighted signals, TV display, and high-speed printer. Transmission times would be fractions of a second as opposed to several minutes.

One of the biggest deficiencies of the existing radar system is that it is two-dimensional, i.e., it presents only the geographical position of each aircraft — not its altitude, the pilot must report his altitude verbally to the controller, who marks it on a little plastic tag placed beside the blip on the radar scope. Two-dimensional radar is inherently unsafe since two planes at the same location but different altitudes are indistinguishable from a collision. The solution to this problem is the “transponder”, a small low-cost black box onboard the aircraft, which senses the altitude and reports it to the radar, every time the radar sends it an interrogation signal; the altitude information is displayed automatically on the controller’s radar scope. This system has been available for a number of years but so far the FAA has implemented it at only one control center (Atlanta).

To expand the capacity of the airways themselves, several types of area navigation systems are available. One of these is the Decca Omnisport, consisting of a course-line computer and a pictorial display. The computer can operate from the existing VOR navais, from more advanced hyperbolic navais (such as Loran) or from self-contained onboard equipment (inertial or doppler navigators). Based on input information from one of these sources, and knowledge of the aircraft’s present position, the computer calculates the range, bearing, and time to any desired destination point. At the beginning of the flight, the pilot inserts the proper aeronautical chart into the pictorial display; as the flight proceeds, a stylus draws the flight path on a translucent overlay, showing the pilot exactly where he is relative to VOR stations, airports, etc. By means of the computer and display, therefore, the aircraft can accurately fly any course; it does not have to remain “on the beam” between successive VOR stations. Thus, the number of possible airways, instead of being limited to direct paths between VOR stations, is expanded to include virtually the entire volume of the airspace.

Area navigation, combined with automation in the form of data links and transponders, will make possible a vast expansion in the number of flights, along with reduced controller workload and greater safety. The controller’s job will consist mainly of monitoring flights to prevent errors and handle emergencies, rather than actively directing every movement of every plane. All the equipment mentioned above is operational today; all that is required to put it into operation is an organizational setup in which the users pay the full costs.

Cost of ATC delays

The number of hours lost, and the direct cost to the airlines, are increasing rapidly. In 1966, according to the FAA, 173,000 hours were lost, at a cost of $57 million. By 1968, according to Air Transport Association figures, the direct cost figure had risen to $100 million (per year). Direct costs include fuel, crew salaries, and extra maintenance. Other costs, not included in the above figures, include customer ill-will, overtime for ground personnel, lost business time for customers, and delays caused to private plane owners.

Footnotes:

2. A graph on p. 53 of the May 1969 issue of Space/Aeronautics illustrates the direct relationship between air crashes and Congressional appropriations for FAA facilities and equipment.
Both this month's authors, Mr. Poole and Mr. Ditko, have been asked to appear in REASON again. Mr. Ditko's artwork appeared originally in Witzend (see May 69 REASON).

Note should be made that the printed format of this issue does not represent a guarantee that the next issue will also be printed. Only if new subscription and renewal revenue warrant, can we print again. Readers who like the printed format can non-sacrificially aid reappearance in several ways. They can renew, even if in the last few weeks they just have, taking advantage of the low price before it expires in November. They could renew for two years, or even three. They can tell friends about REASON, or mail in names and addresses of likely new subscribers. If readers know of (or are) writers or artists or individuals knowledgeable in a technical or academic field or probable editorial concern (aviation is one obvious example), or if they have heard (or given) an exceptional lecture recently, they might act as temporary literary agents and drop us a card.

The previously announced topic for the September issue has been delayed for this special issue.

Advertisements for the second printed issue are now being accepted. Also, regional (by zip) remailing and insertion are available, as well as art services (see Catalyst ad). Rates are determined on an individual basis. Write with details concerning your marketing needs.

Please note that beginning with this volume REASON operates on a 12 month cycle; keep this in mind next June when you leave for the summer.

As earlier promised, and ready later than at first planned, here is the list of on and off campus pro-Objectivist groups. Our purpose here is to encourage correspondence and inter-organizational work where such would improve the quality of the groups involved. (Our personal stake is an increase in potential market.) It is not our aim to promote or administrate any particular regional or national exchange or alliance, so please don't write me for further information. Only send to me corrections, additions, or deletions, which will be printed thereafter. Here are some possible immediate effectiveness: tape and speaker exchange, addressing and reproduction services pooling, advice.

Cal State Students of Objectivism, Trident bldg., Student Activities, 5151 State College Dr., L.A. Ca. 90032

Purdue radio program, Richard Matula, 224½ Sheetz St., Apt. 4, W. Lafayette, Ind.

U. Toronto Radicals for Capitalism, A. F. Noble, Apt 2, 3375a Bathurst St, Toronto, Ontario, CANADA

U Hawaii SC/students for Laizzez-Faire, Bill Danks, 1646 Clark St, Apt 103, Honolulu, Hawaii 96822

MIT RadCaps, Box 555, 3 Ames, Cambridge, Mass 02139

Northeastern O Study G, Myles Salmon, 84 Gordon, Brighton, Mass 02135

NYUSO, student activities office, Box 16, NYC 10453

NYU Society for Individualism, (other campus) Loeb Student Center, Box 16, Wash Square, NYC 10003

ITT Committee Against Student Terrorism, David Posmantier, 3330 S. Michigan Ave, Chicago, Ill 60616

U Wisconsin Committee to Defend Individual Rights, PO Box 807, Madison, Wis 53703 tel 251-0424
Correction: This month's article should have read: airport financing comes primarily from three sources: municipal bonds (for basic equipment and taxiways), airline investment (for terminal buildings), and federal tax money (for control towers, instrument landing aids, and runways). Also, amend point 3 to read: local taxpayers are increasingly reluctant to commit themselves to large-scale bond issues, especially for things not of direct benefit to them.

Harvard Society for Individualism, Dean Ahmed, Duster House J48, Harvard University, Cambridge, Ma

Johns Hopkins U RadCaps Bill Van Doren, Box 2130, JHU, Balti, Md 21218

San Diego State Committee for Man, George Blaisdell, 1935 Berry St. Lemon Grove, Ca 92045. Also off-campus.


Columbia CAST, Box 922, Ansonia Station, NYC

U Penn Committee to Combat Campus Coercion, Eric Veyhl, Physics Dept, UP, Phila, PA

NYC

Stanford New Intellectuals Irwin Shameley, PO Box 2265 Grand Central Station NY 10017

Michigan State U OUST and SO, Paul Sadler, Box 153, East Lansing, East Lansing, MI 48824

U Virginia RadCaps, Dennis Golliday, Orchard Dr, Crozet, Va 22932

Cal Tech Aristotelian Society, Winett Student Center, CIT, Pasedena, Ca 91109

Stanford Society for New Intellectuals, James Weigl, Box 8924, Stanford, Ca 94305

BOSTON

Principal, Phil Student, Andover, Mass. 01810

DETOIT

Detroit SO, D Bilinski, 3 Mile Rd, Detroit, Mich

SAN FRANCISCO

San Francisco SO, Paul Eisen, 2149 Beach St, SF, CA

WASHINGTON

Washington SO, Edwin Locke, 11200 Lockwood, Apt 1415, Silver Spring, Md 20901

CHICAGO

Chigaco ANI see IIT

The August issue of Chicago's ANI newsletter notes that one of its subscribers notified the editors that Dr. Peikoff's book may not be published for as long as a year because the Doctor has decided to expand sections to explain points not familiar to the non-Objectivist audience it should enjoy.

Bill Danks, whose adress is listed elsewhere here, would like to sponsor a national convention of students of Objectivism next summer. Anyone interested?

Complimentary copies of this issue are being sent to patrons of Darlene Bridge Presents and to a number of friends of readers. If you wish to send compliment- ary copies of this issue to friends or acquaintances, simply list them on the coupon page.

A large number of the May issue returned through the mail because readers moved either permanently or merely for the summer, but didn't inform us of the change. Such readers can claim their truant's with a quarter. Tell us when you go, as far in advance as possible; our one man subscription department simply can't (won't) track you down.