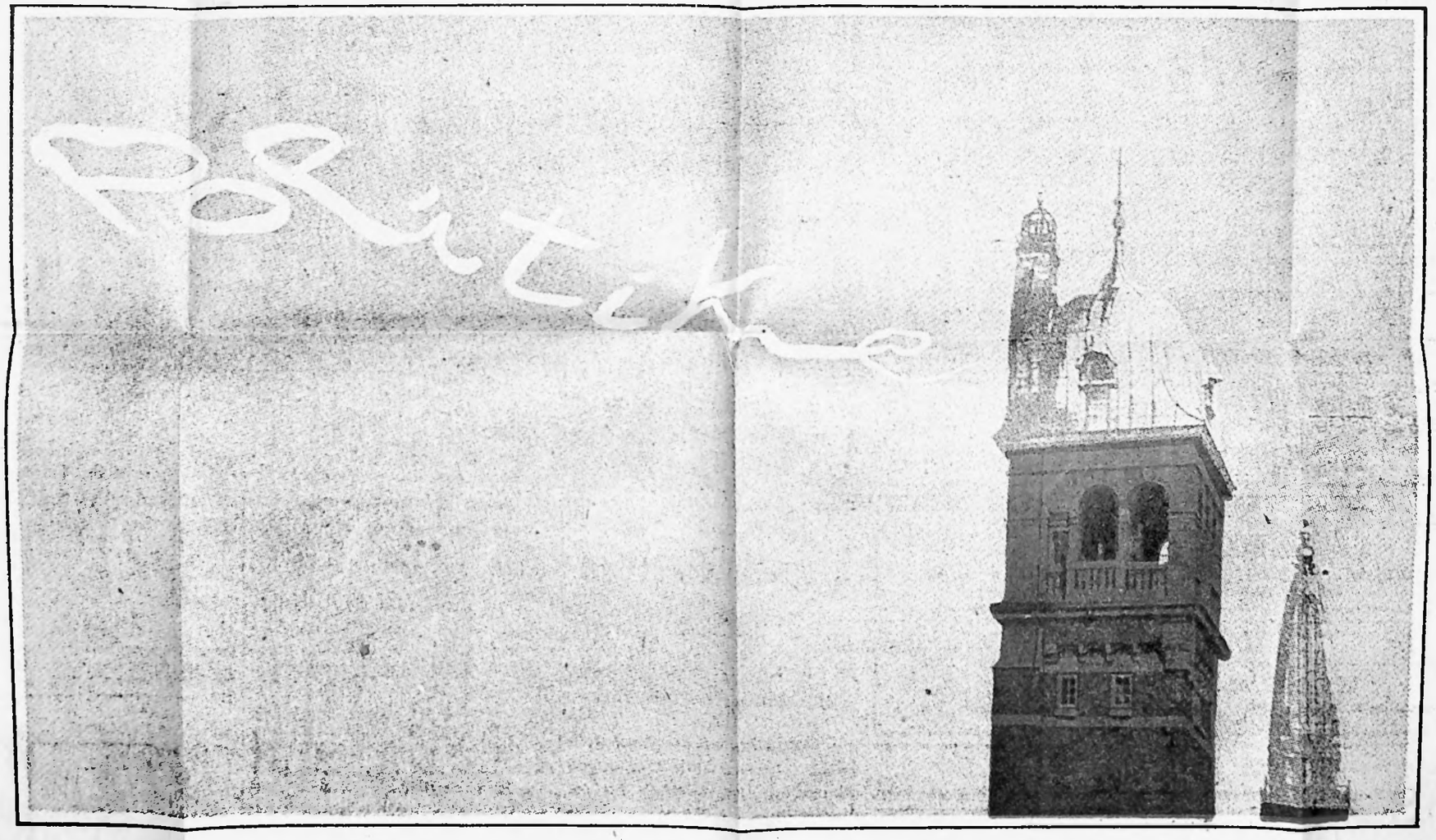
M. L. Eramson's SCRAP BOOK.

M. L. Bramson.

BRAVO, MR. BRAMSON

For 52 år siden gav han københavnerne hold i nakken — i dag har han opfundet en jernlunge

Af Hugo Truelsen



Titusinder af københavnere samt beboere fra Charlottenlund over Tåstrup til Roskilde pådrog sig alvorlige hold i nakken, da de 3. august 1923 stirrede efter flyveren, der skrev navnet Politiken over Rådhuspladsen. Sjovt at tænke sig, at piloten i dag er 80 år og stadig boltrer sig i skyerne.

RÅDHUSPLADSEN i juni 1975. Midt i malstrømmen af turister, standser en lille hvidhåret herre fra San Francisco pludselig op og stirrer med et underligt, indadvendt blik på den himmelblå himmel over tårnet på Palace Hotel. 'By Jove! ', mumler han *for sig selv, og mens sarier, Lederhosen og revnefærdige* rygsække fra Saskatchewan puffer og skubber til ham fra alle sider, mumler han videre på uforfalsket dansk: 'Det var jo der, jeg for 52 år siden tossede rundt i tre kilometers højde og gav københavnerne hold i nakken'.

Bravo, mr. Bramson. Bortset fra, at højden ikke var tre kilometer, men snarere 2800 meter, er det fuldkommen rigtigt, at ikke alene københavnerne, men også folk så langt væk som i Glostrup, Charlottenlund og Roskilde fredag den 3. august 1923 gik rundt med hold i nakken og spurgte hinanden: — Så du røgen?

Aftenen i forvejen havde de nemlig i titusindvis set Dem boltre sig i Deres S. E. A.5-fly over København og med 200 kilometer i timen skrive navnet POLITIKEN i røgskrift på aftenhimlen. Det talte man meget om den sensommer, skønt præsident Warren G. Harding lå for døden i USA, den tyske diskonto steg fra 18 til 30 procent, mens Englands premierminister mr. Baldwin indkaldte Parlamentet til ekstrasamling for at klare det europæiske problem og en falleret godsejer på Roskilde-egnen vakte opsigt ved at brænde sit fædrene gods af og ende som råblende sindssyg.

I det hele taget en begivenhedsrig tid; men en flyver, der skrev ting i luften med røgskrift, havde man dog alligevel aldrig oplevet i København anno 1923.

— Well, indrømmer Mogens Louis Bramson fra San Francisco, det var andre tider, og det hele gik snurrigt til. Min far var overlæge Louis Bramson, min mor forfatterinden Karen Bramson, og selv forsøgte jeg at få en studentereksamen fra Metropolitanskolen. Men jeg blev så afsindigt forelsket i en pige, at det gik ud over studierne og derfor blev jeg flyttet til Birkerød Statsskole. Her fik jeg min studentereksamen, og under et ferieophold på Skagen så jeg i min kikkert kejser Wilhelm IIs lystyacht stævne sydpå. Kort efter lød skuddet i Sarajevo.

Nå, jeg fik min studentereksamen og rejste til England, hvor jeg begyndte at læse til ingeniør, og med tiden lærte jeg den rumænske professor Constantinescu at kende. Han havde just opfundet en ny maskinkanon, som jagerpiloterne kunne affyre ud mellem propelbladene på deres fly, mens maskinen var i fuld fart. En indviklet affære, som først og fremmest byggede på lydbølger, så projektilerne ikke smadrede propellerne. Den skal jeg derfor ikke komme nærmere ind på, men nøjes med at fortælle, at jeg blev professor Constantinescus forsteassistent, og at en international ekspert i krigsforelse senere var så venlig at konstatere, at 'det synkroniserede maskingevær' faktisk var det våben, der sikrede England og deres allierede sejren.

Efter Første Verdenskrig købte M. L. Bramson sig et udrangeret fly, og en gammel hugaf i det franske flyvevåben lærte ham at flyve. Derefter slog han sig ned på Hendon Flyveplads i England og lærte sammen med talrige eks-piloter fra krigen den nye annonceform: Annoncer i røgskrift på himlen. Og da Bramson var den eneste, der talte skandinavisk, blev han sendt til Skandinavien, mens de øvrige piloter fløj til USA for at 'overplastre himlen med annoncer for Lucky Strike'. Det var i De brølende Tyvere.

Senere var M. L. Bramson manden, der i trediverne ikke alene gik ind for jet-motoren, men også skaffede dens opfinder Frank Whittle penge til at udvikle den for. Englænderne troede ikke rigtigt på projektet og brugte i begyndelsen de nye jetjagere til udelukkende at skyde de tyske V-2-bomber ned med. At hele verden i dag flyver jet, kunne de naturligvis ikke vide dengang.

Siden blev mr. M. L. Bramson af det engelske udenrigsministerium sendt vestpå for at åbne nye markeder i Stillehavsområdet. Det gjorde han så, og efter i mange år at have arbejdet for en amerikansk multimillionær med interesse for fly og anden teknik, havnede han til sidst som rådgiver for 'Institutes of Medical Services' i San Francisco.

Jernlunge

Her har han udviklet en jernlunge, som aldrig tidligere er set, og som man end ikke kender i Danmark. Derfor var han inviteret som en højt estimeret gæsteforelæser, da danske læger for nylig holdt kongres i Nordsjælland.

— Og det er jo meget sjovt, siger M. L. Bramson, at vende tilbage til Danmark, hvor jeg for 52 år siden gav københavnerne hold i nakken ved at skrive POLITIKEN på himlen over Rådhuspladsen. Men De har alligevel ikke hørt min bedste historie.

I 1923, da jeg som 'røgflyver' fik bestilling på at reklamere for Politiken over Rådhuspladsen, havde et svensk firma samtidig bestilt mig til at gøre reklame for dets bananer over Stockholm. Det gjorde jeg så i to dage — hvorefter jeg begyndte at kede mig.Ergo foreslog jeg banandirektøren, at vi lavede luftreklamen om til en rebus således, at vi i stedet for at skrive 'Spis Bananer' skriv 'Spis B —' efterfulgt af en banen i røgskrift.

Røg

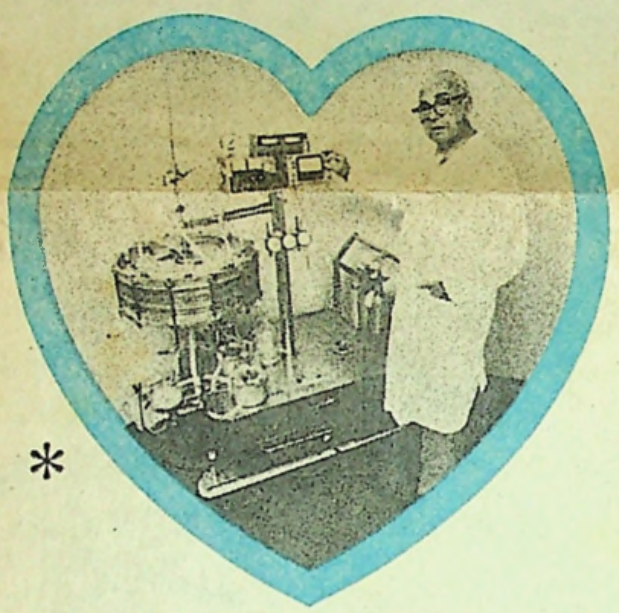
Jeg skal ikke her komme ind på enkeltheder om røgreklamens ædle kunst eller turbulensen i de højere luftlag. Det lange af det korte er, at da jeg havde tegnet det store B i Bananer og derefter tegnede en særdeles nydelig banan i røgskrift, ville turbulensen i de øvre luftlag, at bananen drev ind mellem de to buer i B'et — og dermed så hundredetusinder af stockholmere den største penis på himlen, de nogen sinde har set...

På lørdag fejrer M. L. Bramson sin 80 års fødselsdag hos sønnen Gordon Bramson i Hellerup. Derefter vender han tilbage til San Francisco, hvor han i fritiden muntrer sig med at gå på vingerne i sit sportsfly.

Eventyrer hjemme igen

Skønt Amerikas præsident lå for døden, og Europa stod i brand, talte københavnerne 3. august 1923 kun om en ting: Nemlig den gale pilot, der skrev Politikens navn i røgskrift næsten tre kilometer over Rådhuspladsen i København. 52 år efter besøger piloten nu København. Her ses han i pilotudstyr årgang 1923. De kan træffe den nutidige Mogens Louis Bramson fra San Francisco på forsiden af 2. sektion.

You may never need this new heart-lung device.



*

But it's nice to know it's there.

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And that's just one important way we serve you. Sophisticated equipment, like the heart-lung machine, for example, may cost hospitals several thousands of dollars. And increase the cost of medical care. But when you're a Blue Cross member, your hospitalization benefits automatically expand to help you meet this new need.

And paying many of your hospital bills, or choosing your own physician, are other "every day" benefits that make Blue Cross membership so valuable. For more details on Blue Cross, fill in and mail the coupon. The quicker, the better. For you. Return it now.

*Heart-lung device available at many hospitals throughout the country. Photo courtesy of Pacific Medical Center, San Francisco.

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12/5/72

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RICHMOND, CALIFORNIA 94808

Oct. 4, 1974

Mr. K.E. Hallikainen
10 Van Tassel Lane,
Orinda, Ca., 94563

Dear Hal,

Many thanks for being Chairman of The Day during Mr. M.L. Bramson's dissertation on Medical Engineering. He's an amazing man and his talk was as stimulating as his diction was interesting.

I understand you were instrumental in acquiring him for our group. Programs like his provide the motivation for our members to attend meetings regularly. So - you see the value of your contribution!

Thanks again!

Sincerely,
Chas.
Charles Wong

LESLIE JERMAN

SCOTSMAN
2-4-79

LEFT: Sir Frank Whittle and (RIGHT) Mr Mogens Bramson.

Visionary who backed Whittle's jet engine

AS the giant Boeing 747 jumbo jet is about to enter scheduled transatlantic service, the Royal Aeronautical Society are preparing to publish for the first time a remarkable 3000-word document which led directly to the financing of the first British jet aircraft engine.

Accompanying the document in the society's February journal will be a powerful plea for belated recognition of the man who drew it up, signed by Sir Frank Whittle, the engine's inventor.

An engineer, Mr Mogens Bramson, now living in San Francisco, was commissioned in 1936 by an Edinburgh-born man, Mr Lancelot E. Whyte, to analyse Whittle's ideas and theories, and it was on the basis of his favourable judgment, formed against a background of many adverse expert opinion, that the financing was arranged.

Whyte was sent to Bramson by a London firm of investment bankers. A financial expert, he was also a theoretical physicist. He is the second of the signatories behind the plea for recognition of what Bramson's judgment has since come to mean to the world.

Whittle had spent five years trying to interest British aero-engine firms in his project. By 1935 he was so depressed about the chances of getting his engine developed—and so short of cash—that he allowed the basic patent to lapse rather than pay a £5 renewal fee.

In the document drawn up by Bramson, the engineer says Whittle's "theoretical calculations and deductions are substantially correct. Should the discovery be successfully put into practice the points of superiority over existing aeroplanes would be: economical speeds of 500 m.p.h. and over, probable ranges of 5000 miles and over, the use of non-volatile fuel, freedom from noises and vibration."

He summed up: "The proposed development, though necessarily speculative as regards time and money required, is so important that it should, if possible, be undertaken."

The judgment, like the invention, was remarkably ahead of its time. Mr Bramson, who signed his findings on October 8, 1935, has recently been asked for any hindsight thoughts. These, too, are to appear in the RAS journal.

He writes that he conducted his practice as a consulting engineer in 1935 from Bush House, London, "and Flt.-Lt. Frank Whittle appeared there one day. He wanted financing for the development of a system of jet propulsion of aircraft, which he had invented.

"About two years earlier he had submitted it to the British Air Ministry, who had turned it down.

"He was a bright, confident, young officer-pilot in the RAF who seemed to know what he was talking about. This impression was somewhat qualified by the eyebrow-raising improbability of his basic thesis that aeroplanes could be made to fly without propellers."

Mr Bramson's initial study of the proposals took two weeks, and "at the end of that period I got quite excited," he said.

"I suddenly felt, 'This must be done!' A survey of my clients produced a London firm of investment bankers, C. T. Falk & Co., whom I approached." They sent Mr Whyte along and he commissioned a full investigation.

The rest is recorded history. Three years later the first Whittle jet engine was tested at Rugby, and the first jet-powered aircraft flew in 1941.

Mr Bramson concludes his hindsight re-reading of the original report: "I find there are only minor points of emphasis rather, than of substance, that would need amendment.

"But any temptation to feel smug about that is immediately squelched by one's immense admiration for the originator of one of the most striking and consequential technological revolutions of our time."

589-0257

LEONARD KRIVONOS
446 HAWTHORNE AVENUE
SAN BRUNO, CALIFORNIA

September 19, 1974

Mr. M. L. Bramson
35 - 21st Avenue
San Francisco, CA 94121

Dear Mr. Bramson,

The enclosed letter to President Ford was inspired by your clear, straighforward and purposeful analysis of our present inflationary "mess". It's the kind of letter I wish I had written myself, since it reflects my views!

Whether your ideas would carry any weight among the "brains" being invited by The President is problematical -- even doubtful; and I'm sure you would agree that the very nature of the political, social and economic views many of them hold, based on their positions of industrial and labor power, could result in resolutions that would be far from realistic or practical.

It's not likely The President will show any great interest in my letter, but this was the best way in which I felt I could express my genuine concern.

Sincerely,

Leonard Krivonos

Enclosure

September 19, 1974

The Honorable Gerald Ford
President of the United States
White House
Washington D. C.

Dear Mr. Presid..,

Sometimes, in considering major issues and problems, simple and straightforward ideas may have more than a kernel of truth in them leading to acceptable workable solutions.

In your inaugural speech to Congress you described inflation as the major economic problem facing our country and in recent weeks you have called for a summit conference on inflation to be held late in September.

If you really meant that you want to overcome inflation, restoring the country to a healthy economic state -- and I do believe you meant what you said -- I would urge you to include on the agenda of the summit meeting opportunities for people from many walks of life to comment. There are people who have their own analyses and thoughtful solutions to the problem.

One such person, in my estimation, is the author of a "Letter to the Editor" which was printed in the San Francisco Chronicle. A clipping of the article is enclosed.

I share his views as the causes of inflation and the remedy he offers.

In my opinion, the writer of the letter touches on some very important issues pointing up inequities in our economic system that have led to the present inflationary spiral.

The author, like myself, wants a healthy society and a creative productive America. I sense in his letter a moderate sensible approach offering solutions that will go far to reduce the runaway inflation we are face with.

Sincerely yours,

Leonard Krivonos

SF Chronicle

THE EDITORS

7/7/74

The Circle

Editor — In a free enterprise-capitalist society such as ours the supply and demand relationship determines price levels. If these rise continually and uncontrollably, the average standard of living decreases. In reaction, the working population protests or goes on strike for higher wages — thus further raising costs and price levels — and the inflation spiral has been established.

How does it start? By an increased demand for, or a decreased supply of consumer goods and services, or both.

Inflation has also been even more simply defined as the state of an economy in which too much money chases too few consumer goods.

How do these elementary platitudes apply to our current and coming miseries? They apply, for example, to the Vietnam war and to our present military budget, which did not decrease when that war stopped. The billions still allocated to "defense" have several consequences: First, the enormous sums paid for armaments and military research and development diverts a corresponding pool of labor away from the production of consumer goods and services, which therefore get scarcer; secondly, the withholding from civilian jobs and production of millions of men retained in the armed forces during peacetime. All of the military pay of these men (except those stationed abroad) adds to the demand for consumer goods and services, while contributing nothing to the supply.

Another example of major causes of inflation: The cumulative deficit of the federal budget is astronomical. Why then doesn't the country go bust? Because the Federal Reserve Board "increases the money supply" as necessary. One way of doing this is, of course, by the manufacture of money by printing it, an activity the government rarely mentions. Another is by issuing treasury IOUs, which is really the same thing.

How then can the inflationary spiral, once started, be stopped and reversed? (1) By reducing military and other government expenditures drastically; (2) By increasing taxation on corporations and high income citizens (partly by closing loopholes such as the depletion allowance for oil companies); (3) By a massive educational appeal to labor and business to increase manhour productivity as a matter of patriotism and self-interest.

The alternatives are appalling.

M. L. BRAMSON

San Francisco.

The life-saving new heart-lung device costs like the devil.

Breathe easy. Your health plan pays in full.

(Photo courtesy of Pacific Medical Center, San Francisco)

The membrane / heart-lung machine . . . A silicone rubber layer, five-thousandths of an inch thin, keeps blood and oxygen separate as in the lung. For the first time in medicine, this machine took over for the lungs of a critically-injured man for 75 hours until he achieved full recovery.

Each time a hospital enhances its medical capabilities, it takes on a costly new burden of equipment and staff. With Blue Cross you're protected because your benefits expand automatically as medical costs increase.

Being able to choose your own physician and to call upon the full range of medical specialists and technicians are other benefits that help make your Blue Cross so valuable. It is the most modern and extensive health care program available to any school employee group in the U.S.

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This advertisement will appear in CTA ACTION October 8, 1971

Ad No. SF-7919—30 inches, B&W, 7 x 10 inches
CTA Action—October 8, 1971
9-23-71—2

SF Chronicle

THE EDITORS 8/7/74

The Circle

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M. L. BRAMSON

San Francisco.

Of Cawss

Editor — That perfessa of English who knows so much about Brooklynese is soitinly not so smaht. No one in Greenpernt, my foist home, even called the hull city "New Yoik." It's pernounced Noo Yawk, of cawss.

HOIMAN PERNDEXTER

Pernt Reyes.

December 27, 1967

Editor
AMERICAN CIVIL LIBERTIES UNION NEWS
503 Market Street
San Francisco, Cal. 94105

Editor:

Mr. Robert Webber, in his December letter to A.C.L.U. News expresses the opinion that A.C.L.U. has in recent years become an "activist political organization". I wish it had, for there are not enough such organizations with the objectivity, intelligence and effectiveness which distinguishes yours. I make this observation parenthetically, for it is beside the real point I wish to make:

Since a person hardly ever needs help in protecting his basic liberties except when he publically says or does something unpopular or nonconformist, it follows that the proper work of A.C.L.U. is selectively concerned with the rights of those who are most likely to be "political activists".

For if one's feelings, speech and actions are those of the majority, one's liberties will be faithfully respected by the powers that be. But when it happens, as it sometimes does, that the majority is wrong on major issues, then the clear-sighted minority must, as a matter of self-preservation and patriotism, become political activists. That is when they need the A.C.L.U.

There is abundant evidence that A.C.L.U. does not necessarily share the views of those whom it defends; the label therefore cannot justly be transferred from clients to defenders.

M.L. Bramson,
San Francisco

MLB:smg

October 12, 1970

Editor
San Francisco Chronicle
5th & Mission Sts.
San Francisco, Calif.

Attn: Miss Carolyn Fisher

Editor:

When political philosophers, such as James Reston and Walter Lippmann, whom he quotes, present an incisive and eloquent critique of the democratic process (Sunday Punch, October 11), any thoughtful reader must feel grateful for the clarification of a difficult subject.

With some diffidence I should like to present an addendum to the proposition that "Nobody can seriously maintain that the greatest number must have the greatest wisdom or the greatest virtue...", which is why majority rule is rationalized as a convenient political device, but is in fact merely the lesser evil.

Since all progressive ideas originate in minorities, and since in our system they can only be realized by a process of successful persuasion, the mechanics of persuasion become of paramount importance.

Let us consider the nature of those mechanics today.

In the technocratic society, the persuasive power of "the media" - the press, radio and television - coupled with advertising techniques is overwhelming (McLuhan). To use it requires either money or free access.

Who has that kind of money and who has free access? Obviously the party in power has a good deal of free access (what the President or Vice President say is news). Also obviously the Republican Party can command vastly greater political contributions than can the Democratic Party. We are therefore driven to the conclusion that, in or out of power, there is a built-in weighting of the scales in favor of conservatism.

Is it possible that this undemocratic imbalance is being consciously or subconsciously perceived by some of our minorities and may explain many of their desperate, counterproductive and violent actions?

If so, should we not drastically cut down the political power of money?

M.L. Bramson
San Francisco

MLB:smg

* * *

MY OLD FRIEND M. L. Bramson, inveterate writer of letters to the editor, had another one in The Chron yesterday, typically lucid (I Love Lucidity). Why so much trash and litter in the downtown streets? Why so few receptacles? By rough count, this is the 873rd letter to The Chron in the past 10 years on this very subject, adding thereby to the general litter. But still nothing is done. So much for vox populi. So much for litter letters to the litteral lettitor. Don't smoke: remember the San Francisco fire. Don't spit: remember the Johnstown Flood. Whatever you were about to do, don't.

M. L. BRAMSON
CONSULTING ENGINEER

25 - 21ST AVENUE
SAN FRANCISCO, CALIF. 94121
(415) 752-7879

10 – 22 – 70

My dear Herb Caen,

The juxtaposition of your all too brief paragraph about my recent letter to the Chron., of observations on someone else's letter about litter, may lead your readers to think that my subject was trash.

It wasn't, it was "the ~~democratic~~ political press". The confusion was therefore most plausible.

Warmest regards

yours

M. L. Bramson

File Medical World News, May, 1972, Vol 13, No. 20

Nine days on a membrane oxygenator

Surgeons at Presbyterian Hospital of Pacific Medical Center in San Francisco have used partial extracorporeal bypass for up to nine days to try to manage desperately ill or severely injured patients through acute respiratory insufficiency. The score to date is only three survivors out of 15 oxygenation cases, but another six patients were deemed to have pulled through their lung crises, only to die from other causes.

Dr. J. Donald Hill and his colleagues were emboldened to try prolonged heart-lung assist because they had a membrane oxygenator capable of treating patients' blood with so little hematologic trauma. Standard bubble- or disk-type oxygenators lead to far more trauma when used for more than six hours, the team observed. Hemorrhage is the procedure's biggest risk, and heparinization must be kept at the lowest effective clot-preventing level.

The essential feature of the low-trauma machine is that the gaseous oxygen never comes in contact with the blood; the O_2 instead diffuses through a silicone rubber membrane that imitates the membranes of the natural lung. The "Bramson lung" used by the San Francisco team also has automatic constant-volume control and a built-in exchanger to warm the blood as it is oxygenated. And with the partial bypass methods employed, 50% to 60% of the patient's blood can be pumped by his heart. Thus he retains a natural pulse.

The lung was designed in the 1950s—for open-heart surgery—by Danish-born, British-trained engineer Mogens L. Bramson. Bramson, 76, is consultant to Presbyterian hospital. He devised a pair of membranes to contain the blood, sandwiched between oxygen-bearing passages that are in turn suspended between water matresses—the water being warmed by circulation through a heat exchanger. Fifteen of these sandwiches form a manifold.

So well did this membrane device work experimentally, and in more than 500 cases in the OR, that Dr. Hill and his team turned to the new use in 1967. The rationale is to buy time for damaged lungs to heal. The criteria for placing patients on prolonged bypass, Dr. Hill told the American Association for Thoracic Surgery at its 52nd annual meeting in Los Angeles this month, are:

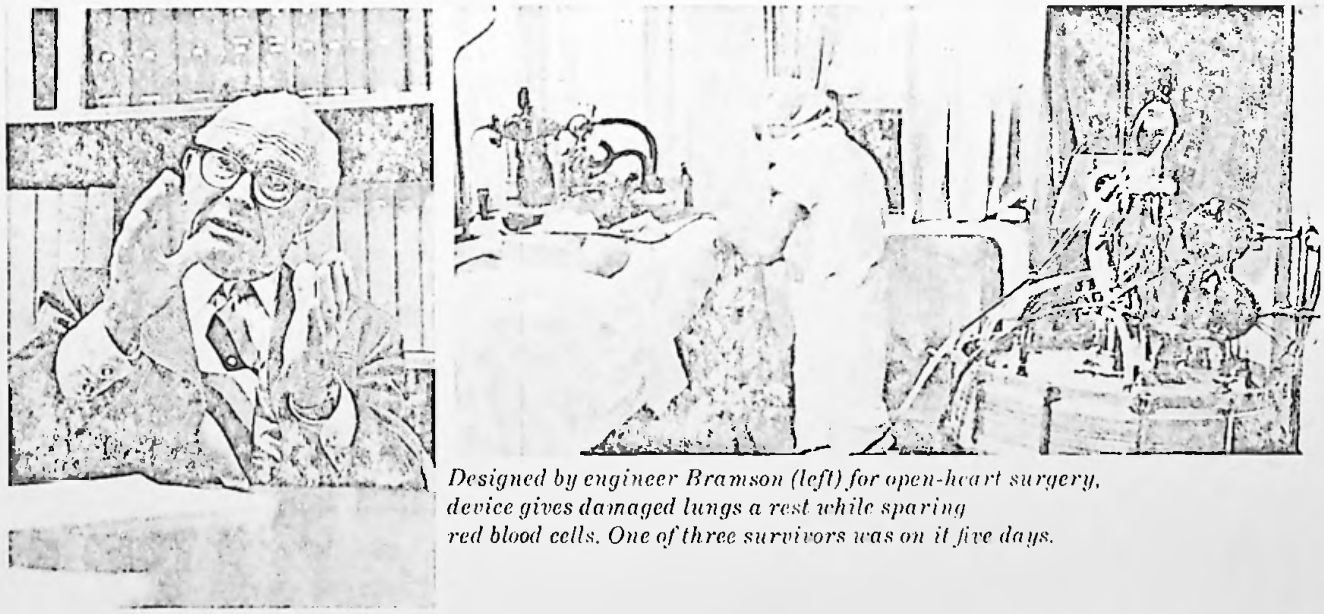
- An arterial oxygen pressure persistently below 35 mm Hg despite maximum respirator support, or
- Progressive signs of central nervous system deterioration due to hypoxemia, or
- Evidence of persistent cardiovascular deterioration due to hypoxemia.

The nine-day patient was a 17-year-old girl who had pulmonary edema, aspiration pneumonia, and massive bilateral pneumothorax after taking an overdose of barbiturates. Her lung function improved the first six days on bypass but she was taken off when progress ceased. She died two hours later of respiratory failure.

The three survivors were maintained on the machine for 44 hours, 75 hours, and five days. The five-day patient, a 19-year-old who sustained a severe fracture in a 50-foot fall, had fat emboli in the lungs, kidney, and brain. In a coma for five weeks, he has since recovered.

The 75-hour perfusion was performed at the Santa Barbara Cottage Hospital after the San Francisco team flew down in a Navy plane with the Bramson lung aboard. Santa Barbara doctors had given up hope of saving a 24-year-old man with shock lung syndrome. He had sustained multiple trauma when hit by a car.

Like the previous eight patients in the series, he was cannulated by the femoral vein to femoral artery route. The Hill team believes this is superior to vein-to-vein bypass—used in the first six patients—because they have measured a higher average increase in systemic oxygen saturation with the V-A route while the flow of blood to the lungs is decreased. ■



Designed by engineer Bramson (left) for open-heart surgery, device gives damaged lungs a rest while sparing red blood cells. One of three survivors was on it five days.

THE TIMES DIARY

24 Feb 1970

Lobbyist [illegible]st gets Hendon N • Whittle backers

He does not talk about himself, but tells me his friends attribute his success to the fact that he was born under C[illegible]er. "I have the tenacity of a cra[illegible]" he says. "I've waited and campaig[illegible]d for something like 10 or 11 years to get into Parliament."

He has a tradition to live up to: his great-gra[illegible]rther was Sir John Elde[illegible] Gorst, the Tory party's first manager, and then a quarter of Sir Randolph Churchill's fourth party. "I made a thorough nuisance of myself. I hope to be constructive, but if I have to I'll be a nuisance", he comments. His Parliamentary causes will be competition and incentives.

Jet ahead

WHAT must be one of the most important documents in the history of aviation, a vital report written in 1935 on the invention by Sir Frank Whittle of the jet engine, is published this month for the first time by the journal of the Royal Aeronautical Society.

Its author, Mogens Louis Bramson, a consulting engineer, came down in favour of Whittle's revolutionary power plant after it had been turned down flat by the British Air Ministry.

The Secretary of State for Air had written, in 1934, that "we do not consider that we should be justified in spending any time or money on it". Scientific investigation, he explained, gave no indication that jet propulsion could be a "serious competitor to the airscrew-engine combination".

Bramson, the man who saw the immense possibilities which government scientists had missed, comments in the journal on the events leading up to his report. Whittle, a "bright, confident" flight lieutenant, came to see him with his theory. Bramson studied it for two weeks "got quite excited", and decided it should be done. He approached the investment bankers O. T. Falk and Company (one of whose partners was Sir Maurice Bonham Carter) who backed the project. As a result, the first Whittle jet was tested three years later at Rugby, and the first British jet aircraft flew in 1941.

Bramson now comments: "Rereading the report after all these years, I find there are only minor points of emphasis rather than substance that would need amendment. But any temptation to feel smug about that is immediately squelched by one's immense admiration for the originator of one of the most striking and consequential technological revolutions of all time."

MY mention of Shapurji Saklatvala's tenure of North Battersea in the Communist interest between 1924 *and* 1929 *has brought a reminder of the full history of Indian members at Westminster. Saklatvala was the first Communist M.P., but he was not the first Indian elected, even when North Battersea originally returned him as Labour member in* 1922.

The first Indian M.P. was in fact a Liberal, Dadabhai Naoroji, who represented Central Finsbury between 1892 *and* 1895. *His departure from the Commons coincided with the arrival of Mancherjee Merwanjee Bhownaggree (later Sir Mancherjee), who sat for Bethnal Green North-east as a Conservative for two full terms,* 1895-1906. *All three men were Parsi lawyers, originally from Bombay.*

Odinga fears

FEARS for the life of Oginga Odinga, detained leader of the opposition Kenya Peoples Union, are revealed in a letter, written in a mixture of Luo and English on two sheets of lavatory paper and smuggled out of Kamiti prison, near Nairobi, last week.

The letter, sent to Osumba Langi, vice-president of the Kenya Students Association in London, accuses a man who was recently detained at Kamiti of being a government spy. It says that his mission is to murder Odinga, apparently no longer in the notorious Hola but on his own at Langata, a detention centre five miles south of Nairobi. The note, written by a close associate, names the alleged spy and says he comes from Gem, a K.P.U. stronghold.

"This man is very dangerous", the letter continues. "He is a fake detainee aimed at finding some information from us, but he is specifically detained for the purpose of harming some of us, particularly Odiero (Odinga's code name).

"Through talks we find that this assignment must be completed by March 31. He says that Odiero must submit to Kenyatta by then or else his life is in danger. He tells some people that he would not care about doing it because the Government has promised him a big reward. He says he is soon being transfered to where Odiero it."

All found

THERE is rejoicing at London Transport, which appears to have been relieved of the irksome task of finding any of the capital necessary to build new tube lines.

Already new lines approved by the Ministry of Transport rank for a 75 per cent "infrastructure" grant; now the G.L.C. has quietly indicated that it will consider putting up the remaining 25 per cent.

In a significant—but largely unremarked—passage in a joint report to the council, its Policy Steering and Finance committees said of current work on the Victoria Line extension to Brixton:

And it has given mankind access to unforeseeable new knowledge.

So why do some churlish souls presume to question whether it was worthwhile, or worth the money?

I suggest that those would-be pragmatists are the victims of two major fallacies: one is that because this country is not spending enough money on the fight against ignorance and poverty, therefore it cannot afford the cost of space exploration. The fact is that we can easily afford both if we get our priorities right, i.e., if we make a sane choice between the alternatives of spending a given number of billions on mass killing or on peaceful cosmic research.

The other fallacy is the notion that the quest for knowledge is futile unless it can be shown in advance to be "useful." The truth is that if, through the ages, men had not sought and treasured knowledge for its own sake, we would still be in the stone age.

And if indeed this great adventure does have in it a touch of glorious madness and whimsy, let us remember, in the words of Trevelyan, the British historian, that "disinterested intellectual curiosity is the very stuff of civilization."

M. L. BRAMSON.
San Francisco.

by Secretary of Defense Melvin Laird and his Deputy, David Packard.

The minions of the Pentagon must have been writhing in agony when they simply had to contradict flatly and publicly explicit statements by their bosses that nuclear missiles, once launched against Russia, can be either prevented from exploding on landing (Laird) or prevented from "continuing" (Packard) by appropriate commands or cessation of signals from the U.S. control (if given before arrival on target).

The Pentagon now says this is not true (AP report, The Chronicle, April 5). Once launched, the Russians — and we, of course — are in for the holocaust.

That the chiefs of the most destructive military machine in history should be ignorant of so fundamental a matter may perhaps be explained by their relatively short period in office. That they were unaware of their own ignorance and so failed to consult their departmental experts before making misstatements of fact in public seems inexcusable.

As one of England's generals said while inspecting his troops before the battle, "I don't know if they will frighten the enemy, but by God they frighten me."

M. L. BRAMSON
San Francisco

'Homicidal Lunacy'

Editor — The balance of "nuclear terror" is a piece of homicidal lunacy so vast and so obvious that a school child, if consulted, would dismiss it as senseless.

Yet it is the concept upon which, more than on anything else, our statesmen are basing and justifying their foreign policy and our country's behavior.

We the people have waited too long; we cannot now by talking reason reverse the buildup of years of paranoid propaganda and tril-

S.F Chronicle, 1-1-69

Why Men Explore

Editor—In concept and execution the journey to the moon and back was bold, brave and of exquisite precision. It exceeded in scientific and organizational skill any prior achievement of man. And it has given mankind access to unforeseeable new knowledge.

So why do some churlish souls presume to question whether it was worthwhile, or worth the money?

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M. L. BRAMSON.
San Francisco.

Chronicle

The Missile Debate 4/9/69

Editor —If total destruction of human life on earth were not the basic subject, nothing could have been more hilarious than the monumental boo-boos committed before a Senate committee and a multi-million television audience by Secretary of Defense Melvin Laird and his Deputy, David Packard.

The minions of the Pentagon must have been writhing in agony when they simply had to contradict flatly and publicly explicit statements by their bosses that nuclear missiles, once launched against Russia, can be either prevented from exploding on landing (Laird) or prevented from "continuing" (Packard) by appropriate commands or cessation of signals from the U.S. control (if given before arrival on target).

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EDITOR 5/2/69

on military hardware that can't be used.

There is, however, just one thing which might start a reversal of the trend: Cancellation by Congress of the scheme for deployment of ABM's. It must be proved to the satisfaction of the key Senators that on the Pentagon's own premises the ABM scheme is useless.

Senator McGovern's suggestion (Dorothy Texier's letter to The Chronicle May 14) to write to the Senators who hold the balance of power, and who are undecided, is therefore urgent. I have responded by sending the following letter to those Senators and hope that others will write to them in a similar vein:

"The principle of our possessing 'sufficient' nuclear power is that it shall be a credible deterrent in preventing the Russians from using their nuclear power. In the current jargon this means that they must never be allowed to believe that by an overwhelming first strike they could prevent us from making an 'unacceptable' second strike.

"The apologists for a limited deployment of the ABM claim that failing such deployment the Russians will believe just that; because a Russian first strike could leave us with only ten per cent of our Minutemen missiles in working order.

"There are two obvious fallacies in this argument: First, the undamaged ten per cent of our Minutemen would suffice to destroy the major cities of Russia. Secondly, by what conceivable means could the Russians by their first strike find and destroy not only ninety percent of our Minutemen, but also our hundreds of nuclear armed submarines, which are permanently afloat and change postion continually?

"They clearly could not; and they know that our 'unacceptable' second strike would therefore be inescapable regardless of any ABMs.

"For these reasons alone, among many others, I urge you to cast your most critical vote against the deployment of the ABM."

M. L. BRAMSON.
San Francisco.

LETTERS TO THE

'Missing the Point'

Editor—Alioto and other critics of the Look article dealing with the alleged interaction of our Mayor and the Costa Nostra are missing the point. No one was accusing the Mayor of being a member of this underworld organization or even actively supporting it. The point is that he admittedly knows alleged members of the organization and did nothing to actively debunk the organization. The "sin" here . . . is one of omission rather than commission.

STANFORD ERICKSON.

San Francisco.

9/26/69.

Obvious Answer

Editor — None of the hard sacrifices now being inflicted upon us to stop inflation are necessary. Only one single executive decision is required: the decision to stop the war in Vietnam.

A simple consideration of the basic nature and classic causes of inflation will show the above to be a statement of fact rather than opinion.

Inflation occurs when too much money ("demand") chases too few goods and services ("supply").

War and weapons manufacture are the economic equivalent of digging holes in the ground and filling them up again. For they reduce the civilian goods production by whatever billions of manhours are diverted to these activities, while at the same time the money available to the people is, if anything, increased (full employment).

The law of supply and demand therefore forces prices and wages up, i.e. inflation.

These blinding glimpses of the obvious have been treated officially as if they were classified secrets. It would never do, of course, for the people to understand clearly that the severe reduction in living standards suffered, or to be suffered, by those with low fixed incomes, could be avoided simply by stopping the war. The pressure to do just that might become irresistible. Accordingly, all other means of stopping inflation (raising interest rates, raising taxes, cutting essential public civil expenditure, price and wage control, etc.) have been practiced or proposed, and publicized ad nauseum.

This conspiracy of silence has been quite a neat trick: Our complacency about the war has so far hardly been ruffled by the inflation issue. And so, when Mr. David Rockefeller bluntly and publicly places the blame for inflation where it so obviously belongs (Chronicle, September 20), it is headlined as a novel disclosure.

Apparently, with good technique, one can fool most of the people most of the time.

M.L. BRAMSON.

San Francisco.

The National Problems

Editor — The Chronicle reported on July 25 that former Chief Justice Earl Warren has called for a reappraisal (which in the context meant a slowdown) of our space program. He did so on grounds which imply that the planned levels of our space effort would inhibit an appropriate effort to solve our domestic problems which "have increased geometrically."

With due deference to Mr. Warren, I suggest that this is a widely propounded non sequitur:

The penetration into space and the discovery of cosmic secrets are problems of national wealth and of science, technology and organization. We are clearly unsurpassed in all of these fields.

The curing of racial bigotry and

S TO THE

Aug. 21-69.

injustice, poverty and rising crime rates are problems primarily of national psychology and mores, and secondly of redistribution of purchasing power. No amount of expenditure on ghetto demolition and rebuilding, or on increased police forces, or even more schools and universities, will alone solve these problems.

Their solution requires, first, the emergence of a national will to discard our traditional dislike and fear of all measures which can be labeled socialistic. Even now — more than 30 years after the New Deal — such measures, when they can no longer be avoided, are nervously presented under euphemistic disguises (War on Poverty, Negative Income Tax, Medicare, etc.).

Secondly, we must create an irresistible new climate in which the Birchers, the Minutemen, KKK's and all the lesser overt and covert paranoids among us (who incidentally are not all white), no matter how well-heeled, become powerless.

Then, and only then, will it become politically possible for the Congress to do, economically and socially, what must be done.

When that time comes, all needed resources will be found. The $24 billion now spent annually on Vietnam can be allocated to the domestic problems, and we will afford and deserve to be exhilarated by our space program as well.

M. L. BRAMSON.

San Francisco

Lawnorder, Lawnorder

Editor — Herb Caen's piece titled "Up With Lawnorder" of August 13 was a gem. Everyone should take Sheriff Earl Randol's advice and cancel their subscriptions. I only read The Chronicle whenever I see a free copy lying around.

We need more sheriffs like Earl Randol and more Mayors like Antonio Gill. We also need more editors and writers who will speak out against the filth and trash and what have you that seems to be invading the whole world.

My only hope is that publishers

Who Foots the Bill

1/30/70

Editor — Mr. Helfand questions propriety of medical research being funded by the Federal government — i.e. by the taxpayer (Letters, January 23). Apparently he does so mainly because he resents the fact that doctors acquire the information derived from such research free of charge and then sell it to their patients.

Directly and implicitly this argument contains a maze of fallacies:

1. Results of such research are published, are public property and cannot be "sold."

2. The doctor's task is to render expert professional services. The more up to date his knowledge, the better will be the treatment — and value — his patients are likely to receive. He cannot and does not charge more because he reads the medical journals.

3. Mr. Helfand thinks the $65 billion health care industry" should foot the medical research bill. It does so, of course, to a large extent; and to that extent it earns huge profits on proprietary, overpriced drugs and on patented equipment, for which the patient pays. But Mr. Helfand will be glad to learn that there is an enormous volume of life-saving techniques and equipment now in clinical use which would never have come into existence, but for government research grants.

If and when he should stand in urgent need of any of these, he may be glad that the essential knowledge was freely available to his doctor and to the health industry, and that the financial burden of his illness will to that extent be lessened.

M. L. BRAMSON,
Consulting Medical Engineer,
San Francisco.

1/22/69

Editor — Mr. Agnew is rapidly emerging as our most prominent exponent of those arrogant American presumptions and actions which have come to be feared and hated by a large proportion of the world's population—including our own.

Whatever makes Mr. Agnew "sick and tired" would, of course, be conspicuously unimportant, but for the growing belief that he is saying what Mr. Nixon also thinks, but does not dare to say for fear of political consequences.

The millions of Mr. Agnew's compatriots, who detest his views, but respect his right to hold and express them, are entitled to reciprocity.

He really should learn that rational, sincere and vigorous opposition to a disastrous Government policy in a duty.

It is not treason. Mindless support of it is.

M. L. BRAMSON
San Francisco

EDITOR

2/19/70

A Dangerous Law

Editor — The "No-knock" statute is a more serious threat to this country as a free society than suggested in your January 29 editorial. It would be bad enough if when enacted the provisions of the bill were strictly obeyed. The real danger, however, will arise when police during the current —or subsequent—paranoid phase will pretend they have "probable cause to believe that suspected narcotics will be destroyed," while they are really hunting their current pet aversion, say a Communist, a Black Panther, or a suspected slayer of a police officer.

They can then break in without warning or self-identification and if the victims shoot to defend their homes they will either be shot or accused of murder.

In fact, no one could be sure it wasn't perfectly legal. When the citizen found out, it would be too late.

Clearly, such a statute would bring us to a state indistinguishable from a police state.

Maybe the ordinary, unimaginative Middle-American has an excuse for the prevalent public indifference toward private injustice. The Congress has none.

M. L. BRAMSON.
San Francisco.

Oct. 19 - 1970

LETTER

The Lesser Evil

Editor — When political philosophers, such as James Reston and Walter Lippmann, whom he quotes, present an incisive and eloquent critique of the democratic process (The Chronicle Sunday Punch, October 11), any thoughtful reader must feel grateful for the clarification of a difficult subject.

With some diffidence I should like to present an addendum to the proposition that "Nobody can seriously maintain that the greatest number must have the greatest wisdom or the greatest virtue . . .", which is why majority rule is rationalized as a convenient political device, but is in fact merely the lesser evil.

Since all progressive ideas originate in minorities, and since in our system they can only be realized by a process of successful persuasion, the mechanics of persuasion become of paramount importance.

Let us consider the nature of those mechanics today.

In the technocratic society, the persuasive power of "the media" — the press, radio and television — coupled with advertising techniques is overwhelming (McLuhan). To use it requires either money or free access.

Who has that kind of money and who has free access? Obviously the party in power has a good deal of free access (what the President or Vice President say is news). Also obviously the Republican party can command vastly greater political contributions than can the Democratic party. We are therefore driven to the conclusion that, in or out of power, there is a built-in weighting of the scales in favor of conservatism.

Is it possible that this undemocratic imbalance is being consciously or subconsciously perceived by some of our minorities and may explain many of their desperate, counterproductive and violent actions?

If so, should we not drastically cut down the political power of money?

M. L. BRAMSON.
San Francisco.

EDITOR

National Dilemma

Editor—Despite the welter of words spoken and written on the race problem, it seems to me that the true nature of this national dilemma is either poorly understood or insufficiently emphasized.

There are two basic, distinct, but interrelated, fields of black frustration: sociological and economic.

Sociologically, there is bigotry, hatred and discrimination. These emotional attitudes can only slowly be eradicated — but the process is well under way, assisted by civil rights legislation.

Economically, we have to face these facts: 1) Ours is a competitive society; increasingly so due to technology and automation. 2) To compete, one must be educated. 3) Education, which includes learning that education is desirable, starts at home, by precept and example, at age two or three. Few Negro parents are able to provide such an environment. 4) To expect at present any but exceptionally lucky and gifted Negroes to compete with whites on reasonably equal terms is therefore nonsense. 5) If every effort is made now to provide a Head Start, and good primary and secondary education for all Negro children, one to one and a half generations must elapse before the process becomes effective and self generating.

But Negroes will not wait another 30 to 40 years for freedom and equality of opportunity. Therein lies the national dilemma.

Is it insoluble? Yes — but: A temporary palliative can and must bridge the waiting period — a guaranteed minimum income or, if you prefer, the negative income tax, which would provide all under-privileged citizens with a tolerable standard of living.

This may well be a "blinding glimpse of the obivious," but we had better take a close look; for the alternative is riots, insurrection and civil war.

M. L. BRAMSON.
San Francisco.

Patterns 4/30/71.

Editor — It is timely to review a certain pattern of U.S. Army behavior toward military and civilian prisoners which has come to light over the past few years.

Item: During the Johnson Presidency it became clear from war correspondents' reports that prisoners taken by our Army units were routinely handed over to the South Vietnamese for "interrogation." This was rationalized on the grounds of language. The interrogations, according to reporters, frequently involved torture, passively observed by our men.

Item: The My Lai massacre, a couple of years after the event, finally resulted in the trial of one man and his conviction of mass murder of unresisting, helpless old men, women and babies. He instantly became the object of a national wave of sympathy and near hero-worship, culminating in Presidential intervention for his greater comfort and promise of final overriding review.

Item: A Washington dispatch in The Chronicle April 28 reports that American volunteer witnesses have testified before Congressman Ronald Dellums that "while serving as military interrogators they routinely used" helicopter drops and other methods to torture and kill Vietnamese prisoners.

On this background, Mr. Nixon has the unmitigated gall to complain about the treatment, usually unspecified, of American prisoners in North Vietnam.

Two questions present themselves: 1) What chance have these complaints of being heeded, so long as the above practices continue? 2) Is there no limit to the abominations which this country will tolerate as long as they are committed by Americans or their "allies"?

M. L. BRAMSON.
San Francisco.

EDITOR 7/1/71

History

Editor—The true significance of the contents, as distinct from the embarrassing disclosure, of the Pentagon historical study, is difficult to assess even from the condensed published extracts. May I suggest that the quintessence of this scandalous story, which the Administration is making futile attempts to kill, is contained in the following quotation from the third of the New York Times articles:

". . . the history reveals a deeper perception by the President (Mr. Johnson) and his aides that the United States was the most powerful nation in the world and that the outcome in South Vietnam would demonstrate the will and the ability of the United States to have its way in world affairs. The history conveys an impression that the war was thus considered less important for what it meant to the South Vietnamese people than for what it meant to the U.S. world position."

So much for the pretensions of selfless concern for a small country under attack.

History can have few examples of greater hypocrisy, greater arrogance, or greater ineptitude associated with overwhelming power. And although Mr. Nixon may seek consolation in the fact that the story so far mainly covers the four previous administrations, he will not escape the mounting distrust of their government by the people of the country.

M. L. BRAMSON.
San Francisco.

S.F. Chronicle, 3/14/72

LETTER

A Judicious Mixture

Editor — Richard Walsh (Letters, March 6) cannot understand how Rodger McAfee, a landowning millionaire, can favor a political system such as communism or socialism which, if realized, would deprive him of his personal property.

His incomprehension, it may be reasonally surmised, stems from a disbelief that idealism and the public good can ever be the first priorities in a man's political convictions. In fact, he thinks such people are mere rubbish "littering our countryside" and would, in a true democratic spirit, gladly pay a "full paycheck" to get rid of them.

I happen to believe, with George Bernard Shaw, that neither total socialism nor total capitalism can succeed, but only a judicious mixture of the two, which is what we are slowly getting in this country. And it is slowly succeeding.

We would get it faster if our countryside were littered with more McAfees and fewer Walshes.

M. L. BRAMSON.
San Francisco.

Could It Be?

S.F. Chron., July 26/72

Editor — The problem of obtaining the return of the American prisoners of war in North Vietnam has been discussed for years — in the press and on television — as if it were unrelated to the ending of the war. It doesn't seem to occur to our politicians and pundits (e.g. Victor Lasky in The Sunday Punch July 23) that historically — and logically — an exchange of prisoners is what must happen, and what does happen when peace breaks out. It has to be a two-way traffic.

Why, then, is there an apparent conspiracy of silence on a matter so obvious and relevant?

Could it be because all (or most) North Vietnamese prisoners taken by Americans have been handed over to the South Vietnamese (for "interrogation" and custody presumably in compliance with the Geneva Convention)?

Could it be because the United States wants the South Vietnamese to continue the war and is therefore in no position to compel our "allies" to hand over their prisoners — even those originally taken by American troops?

Could it be because those still alive are known to be not very presentable?

Or could it be because they are all, or nearly all, dead?

The CIA is pretty sure to know the answers to these questions. The American public, and the Vietnamese public, North and South, are entitled to know, too.

M. L. BRAMSON.

San Francisco.

EDITOR 8/4/71

Functional Hospitals

Editor—M. L. Bramson (Letters, July 30) states "the primary function of a hospital . . . is functional excellence." He would think me a quibbler perhaps if I pointed out that the primary function of a hospital is to make people well. Let me increase the voltage by saying further that functional excellence frequently thwarts that goal.

Functional excellence (efficiency) is, at best, only a blessing to the staff though every building influences implacably those who use or see it. Cold, sterile . . . halls and exteriors . . . create inexorably cold sterile feelings in nurse and patient alike. Certainly this is the antithesis of the warm comfort needed so badly by the patient.

The cardiovascular department in which Mr. Bramson works may be a-bristle with the newest machines but no patient will ever be wheeled in who isn't touched adversely by that awesome, intimidating bank of functional excellence.

Hospital personnel have long since come to celebrate that which is machine-like, sterile and inhuman, and functionally excellent hospitals have helped impose this sickening coldness. People dread hospitals because of the rank sadism which is encouraged by those who believe that the primary function of a hospital is functional excellence.

BARBARA WHITNAH.

Berkeley.

EDITOR 8/13/71

Fears and Hospitals

Editor — Barbara Whitnah makes the indisputable assertion (Letters, August 4) that the primary function of a hospital is to make people well. But she then goes on to explain with questionable logic that excellence in the performance of that function is somehow bad.

So apparently are efficiency ("only a blessing to the staff"), sterility (of all things) and machines (regardless apparently of their life saving purpose of effectiveness). These "inhuman" features of hospitals are, it appears, "celebrated" by the hospital personnel; functional excellence is "awesome and intimidating" and those of us who believe in it are encouraging "rank sadism."

The only safe conclusion to be drawn from this somewhat overemphatic language is that Miss Whitnah dislikes hospitals, their staffs and equipment — perhaps, we may conjecture, through some unpleasant personal experience — and that she has blurred conceptions of what it takes to make people well.

Illness is frightening, and patients tend to associate their fears with the hospital to which they are taken. It is unkind and very wrong to induce additional fears by irresponsible and absurd accusations against the healers.

M. L. BRAMSON.

San Francisco.

EDITOR 7/30/71

It's Functional

Editor — My somewhat casual, but much admired friend, Herb Caen writes July 25 "Final slice of urban blight we will have to live with the rest of our lives: The new Presbyterian Hospital, which blocks Clay street at Buchanan. The Planning Commissioners who approved that should be hung in effigy, or Daly City."

Allow me to remind your readers that the primary function of a hospital unlike that of a woman, is functional excellence, rather than beauty. Both are of course desirable, and the magnificent new Pacific Medical Center will in fact be so endowed.

May I therefore unofficially invite Mr. Caen to come and inspect a scale model of the new center, which is on exhibit in the lobby of the old hospital. I hope he will like it, but even if he doesn't, we may have a chance of convincing him that his dislike "for the rest of his life" may last longer, thanks to its functional excellence.

I should add that I am not entirely unbiased. I work there.

M. L. BRAMSON,
consulting engineer,
Department of
Cardiovascular Surgery.
San Francisco.

5/1/73 LETTERS TO THE EDITOR

At the Core

Editor — While the world is waiting breathlessly for the emergence of the final evidence showing whether the President was or was not in the know before the fact, may I suggest that this is not really as important as it seems.

At the real core of the Watergate scandal is the quality of the men chosen by Mr. Nixon as his intimate advisors to whom he has thought fit to delegate immense powers.

For this choice he, and he alone, is responsible — and by the same token for their actions, authorized or not.

The real issue is the President's fitness for the job of selecting men of outstanding ability and integrity, and the American people should bear in mind that it takes a man of integrity to recognize a lack of it in others.

M. L. BRAMSON.

San Francisco.

EDITOR

Aug 30, 1973.

Amplification

Editor — Royce Brier's column of August 15 is an overdue blast of cold common sense. However, its basic implication is that self - government is preferable to any known alternative, but that it is "witless" and futile to try to impose it on people who do not understand it.

It seems to me that this thesis needs amplification; for, since government by majority presumes that the majority, on balance, is wiser and better informed than the minority, a clearly fallacious presumption, self-government resolves itself into an exercise of our sacred right to misgovern ourselves.

I forbear to labor the point by obvious examples.

But it does further emphasize Brier's point that the self-righteous, forcible imposition of such a system by outsiders is a fraud and a hoax.

M. L. BRAMSON.

San Francisco.

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M. L. BRAMSON.

San Francisco

Long Road to Peace

3/22/74

Editor — As a long-time admirer of James Reston's incisive eloquence, spiced as it always is with flashes of subdued irony, allow me nevertheless to take issue with the philosophy underlying his Sunday Punch column, March 14.

He seems to assume that a genuine U.S.-Russian detente implies a belief that each side will fairly soon abandon its capacity for unpreventable total nuclear destruction of the other side.

This would indeed be a glorious move away from insanity. But it would require deep mutual trust.

For the initial progress by stages from a bilateral capacity for, say, seven-fold overkill to a mere capacity for "total mutual annihilation" would call for agreed precise synchronization. This would be even more critical when approaching the goal of bilateral nuclear incapacity — the goal of ultimate sanity. That in turn would mean the abandonment by both sides of super world power status as presently held and cherished.

Is there any conceivable basis on which the Russian hierarchy could be expected to trust Mr. Nixon's good faith to that potentially fatal extent? Or vice versa, for that matter?

I therefore suggest that on the basis of recent history genuine detente can best be promoted, using trade as well as the Kissinger technique, by slowly and patiently increasing personal contacts until each side becomes firmly convinced that the other side also regards the alternative to nuclear phase-out as stark lunacy.

M. L. BRAMSON.

San Francisco.

Oakland Tribune 6/11/71

COAST GUARD

Mercy Flight Arrives In Canada

A big Coast Guard C-130 Hercules patrol plane was pressed into service this morning to fly a unique heart-lung machine to a 17-year-old girl dying of pneumonia in Winnipeg, Canada.

The 1,000-pound Bramson Membrane Oxygenator, the only device of its kind in the world, was rushed from the Pacific Medical Center in San Francisco, accompanied by a medical team of six persons headed by surgeon Dr. Donald Hill.

Winnipeg General Hospital doctors had requested the machine as the only hope for Susan Stockburn, 17, of Winnipeg.

It was the second such emergency 1,500-mile flight of the machine since it was built after the design of engineer M. L. Bramson in 1961 by the Hallikainen Instrument Co. of Richmond.

In November 1969 the device and Dr. Hill were flown to the same hospital for use by Lynn Berksen, 19, whose chest had been crushed by a truck.

She remainded on the heart-lung machine for 6½ days, during which time the functions of her heart and lungs were performed by the device. She died at a later date of complications.

Most heart-lung machines can be used for only a few hours during surgery whereas the Bramson device permits the vital organs to rest and recuperate for an extended period.

The plane left San Francisco at 4:45 a.m. and arrived in Winnipeg shortly after 9 a.m.

An S.F.-to-Canada Race for a Life

S.F. Chronicle Nov. 7, 1969

Winnipeg
Manitoba, Canada

A 19-year-old Winnipeg Universitycoed is breathing today, and her chances for survivial are increasing hourly, because of a 1000-pound heart-lung machine flown here with a crew of specialists from San Francisco's Pacific Medical Center.

Pretty, dark-haired Lynn Berksen of Saskatchwan was on a Halloween hayride Friday night when she fell off the crowded wagon and its wheels rumbled across her chest, crushing her lungs.

By Saturday morning, doctors in the intensive care unit at Winnipeg General Hospital said Lynn was dying of lack of oxygen. Then, Dr. Joseph Lee, an anesthesiologist formerly at San Francisco General Hospital, remembered that two San Franciscans, M. L. Bramson, a consulting engineer and Dr. Donald Hill, a cardiac surgeon had just developed a unique machine capable of oxygenating blood for long periods of time.

He communicated with Bramson and Hill, then appealed to the special services division of the Manitoba government for help. A jet airliner was chartered at a cost of $8700 and what happened thereafter, Hill said, was "incredible."

"We were called at 7 o'clock Saturday night," he said. "We were airborne by 9:10 — the machine, Bramson, myself, and two nurse-technicians, Marilyn Blake and Madeline Solomon.

"We were in Winnipeg at 2:10 a.m. and by 5:30 a.m. the girl was on 'bypass' and the machine was operating."

Hill said Lynn's newly oxygenated blood is being circulated through a half-inch diameter tube inserted in a vein in her groin that runs up and around her heart. He said the blood is circulating out of the chest at the rate of two liters a minute.

Until the present time, Hill said, the machine has been used for periods no longer than 23 hours. But it has been keeping Miss Berksen alive for nearly five days and there is no evidence that she has suffered brain, heart or kidney damage.

The Bramson machine was developed initially for use during open heart surgery and then two years ago he and Hill began adapting it for long-term supportive use.

Hill said the machine here and a prototype at Pacific Medical Center in San Francisco are believed to be the only ones of their kind.

He said he, Branson and the two nurse-technicians will return to San Francisco "when everything here is all right." He would not hazard a guess when that might be.

Their return home, however, will be less dramatic. He and his colleagues will trave by commercial airline and the life-saving machine will be sent air freight.

"The bill this time won't be any $8700," he said.

Medical World News, May 19, 1972

Nine days on a membrane oxygenator

Surgeons at Presbyterian Hospital of Pacific Medical Center in San Francisco have used partial extracorporeal bypass for up to nine days to try to manage desperately ill or severely injured patients through acute respiratory insufficiency. The score to date is only three survivors out of 15 oxygenation cases, but another six patients were deemed to have pulled through their lung crises, only to die from other causes.

Dr. J. Donald Hill and his colleagues were emboldened to try prolonged heart-lung assist because they had a membrane oxygenator capable of treating patients' blood with so little hematologic trauma. Standard bubble- or disk-type oxygenators lead to far more trauma when used for more than six hours, the team observed. Hemorrhage is the procedure's biggest risk, and heparinization must be kept at the lowest effective clot-preventing level.

The essential feature of the low-trauma machine is that the gaseous oxygen never comes in contact with the blood; the O_2 instead diffuses through a silicone rubber membrane that imitates the membranes of the natural lung. The "Bramson lung" used by the San Francisco team also has automatic constant-volume control and a built-in exchanger to warm the blood as it is oxygenated. And with the partial bypass methods employed, 50% to 60% of the patient's blood can be pumped by his heart. Thus he retains a natural pulse.

The lung was designed in the 1950s—for open-heart surgery—by Danish-born, British-trained engineer Mogens L. Bramson. Bramson, 76, is consultant to Presbyterian hospital. He devised a pair of membranes to contain the blood, sandwiched between oxygen-bearing passages that are in turn suspended between water matresses—the water being warmed by circulation through a heat exchanger. Fifteen of these sandwiches form a manifold.

So well did this membrane device work experimentally, and in more than 500 cases in the OR, that Dr. Hill and his team turned to the new use in 1967. The rationale is to buy time for damaged lungs to heal. The criteria for placing patients on prolonged bypass, Dr. Hill told the American Association for Thoracic Surgery at its 52nd annual meeting in Los Angeles this month, are:

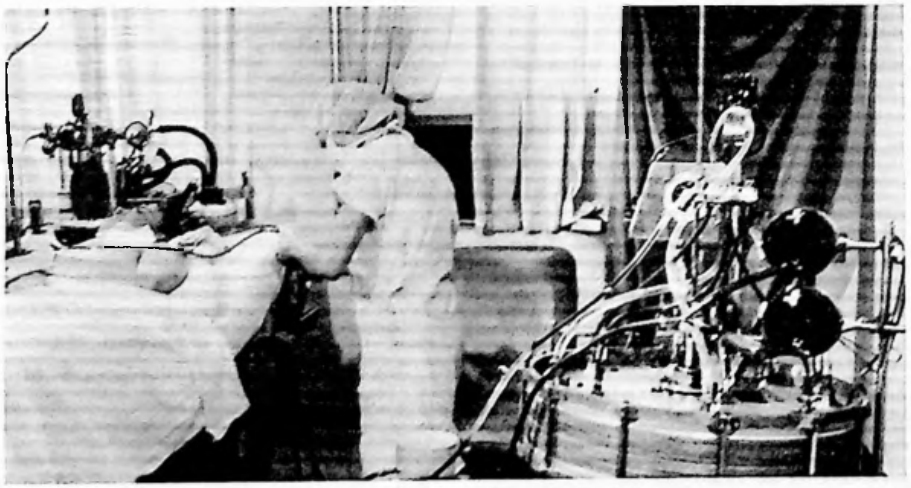
- An arterial oxygen pressure persistently below 35 mm Hg despite maximum respirator support, or
- Progressive signs of central nervous system deterioration due to hypoxemia, or
- Evidence of persistent cardiovascular deterioration due to hypoxemia.

The nine-day patient was a 17-year-old girl who had pulmonary edema, aspiration pneumonia, and massive bilateral pneumothorax after taking an overdose of barbiturates. Her lung function improved the first six days on bypass but she was taken off when progress ceased. She died two hours later of respiratory failure.

The three survivors were maintained on the machine for 44 hours, 75 hours, and five days. The five-day patient, a 19-year-old who sustained a severe fracture in a 50-foot fall, had fat emboli in the lungs, kidney, and brain. In a coma for five weeks, he has since recovered.

The 75-hour perfusion was performed at the Santa Barbara Cottage Hospital after the San Francisco team flew down in a Navy plane with the Bramson lung aboard. Santa Barbara doctors had given up hope of saving a 24-year-old man with shock lung syndrome. He had sustained multiple trauma when hit by a car.

Like the previous eight patients in the series, he was cannulated by the femoral vein to femoral artery route. The Hill team believes this is superior to vein-to-vein bypass—used in the first six patients—because they have measured a higher average increase in systemic oxygen saturation with the V-A route while the flow of blood to the lungs is decreased. ■



Designed by engineer Bramson (left) for open-heart surgery, device gives damaged lungs a rest while sparing red blood cells. One of three survivors was on it five days.

New England Journal of Medicine March 23, 1972.

BUYING TIME WITH ARTIFICIAL LUNGS

THE membrane lung is an extracorporeal device for exchanging blood gases. By preventing hypoxia and hypercapnia, use of the membrane lung can maintain life while otherwise intolerable pulmonary damage heals. Repair is possible because appropriate levels of extracorporeal support can relieve the patient's lungs of their primary burden of respiratory gas exchange and of the handicaps of conventional therapy: high ventilator pressures and inspired oxygen concentrations.

The article by Hill et al. in this issue of the *Journal* presents an unusual case in which prolonged extracorporeal oxygenation enabled improvement of impaired pulmonary gas exchange and eventual survival. Like all existing membrane lungs, the Bramson heart-lung machine used in this case exchanges respiratory gases through thin polymer membranes, a gentle means of avoiding the progressive destruction of blood cells and proteins caused by bubble and disk lungs.

Early clinical studies have proved that this device is capable of prolonged, reliable operation.[1] Kolobow et al. used another membrane lung to demonstrate that venovenous and venoarterial perfusions in excess of one week would not produce detectable hematologic or pulmonary damage in healthy animals.[2] Reliable silicone rubber membranes in surface areas large enough for adult use have been developed since 1967, and during this time there have been approximately 40 attempts to use extracorporeal assistance to reverse acute respiratory failure in patients. None – before Hill's – succeeded in saving the patient, who frequently succumbed to nonpulmonary processes. These perfusions were also plagued by hemorrhages from the lungs, brain, retroperitoneum and cannulation sites. Using sheep, Kolobow demonstrated that reduced heparin dosage sharply decreased hemorrhagic complications.[3] Hill, in this article, describes the absence of hemorrhage and of thrombosis in the membrane lung; heparin infusions were low enough to permit Lee–White clotting times of as little as 25 to 40 minutes. However, this patient had thrombocytopenia before perfusion, and platelet counts fell to even lower values during perfusion – facts that may have permitted the successful use of decreased heparin levels. Indeed, we have done clinical perfusion in patients with platelet counts below 20,000 per cubic millimeter; in these patients without heparin therapy there was no evidence of extracorporeal thrombosis.[4] However, in cases without thrombocytopenia, when we perfused at low clotting times, we noted thrombus formation within the membrane lungs. Thus, appropriate levels of heparinization remain an enigmatic and vital component of successful perfusion.

Extracorporeal respiratory gas exchange can be channeled via two very different circulatory routes: vein to vein (venovenous) or vein to artery

(venoarterial). Both have positive and negative features that must be weighed in the choice of the best procedure for each case. In the past, Hill reported clinical venovenous bypass (prepulmonary bypass). Although this route provides much greater extracorporeal blood flows, is technically simpler and provides greater oxygen tensions to the lungs, brain and heart, it has the disadvantage of forcing the injured lung to trap any emboli produced. The venoarterial route used in the case reported has the advantage of decreasing pulmonary blood flow and cardiac output, but it requires a large artery cannulation (femoral or axillary) and provides lower extracorporeal blood-flow rates. Pumping blood from the venous system to the femoral artery uses the vasculature of the lower body as a filter for any emboli that may be generated, thus protecting the injured lung.

Undoubtedly central to Hill's reported success was an apparently rapid progression of the pulmonary disease leading to an early decision to begin extracorporeal support. We have found it futile to postpone perfusion until the pulmonary disease has progressed from initial edema, hyaline-membrane formation and polymorphonuclear infiltration to alveolar destruction and collagenization; at that point, even a week or more of extracorporeal support may not prevent progression to fibrosis and permanent loss of pulmonary gas exchange. Early institution of extracorporeal support is vital to its success.

In sum, Hill has conclusively demonstrated that post-traumatic pulmonary insufficiency and fat embolism are amenable to extracorporeal support and survival; it must now be ascertained which of the other kinds of acute pulmonary failure can be aided by prolonged extracorporeal support. In the meantime, physicians who care for hypoxic patients must continue to follow the success and progress of clinical extracorporeal oxygenation; for when it appears that maximal conventional management of acute respiratory insufficiency will fail, extracorporeal membrane-lung assistance must be considered.

WARREN M. ZAPOL, M.D.
RICHARD J. KITZ, M.D.

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an AOPA PILOT special report

The AOPA Pilot
May 1972

UPDATER COURSE For 'Retreads' (And Others)

Originally developed for those who have not been behind the wheel for an extended period of time, Updater Course proving of value to 'current' pilots too

■■ In the rapidly changing flying business, any pilot who has been away from the circuit for a couple of years or more will have his homework cut out for him. A made-to-order answer is the new one-day Updater Course sponsored by the AOPA Air Safety Foundation.

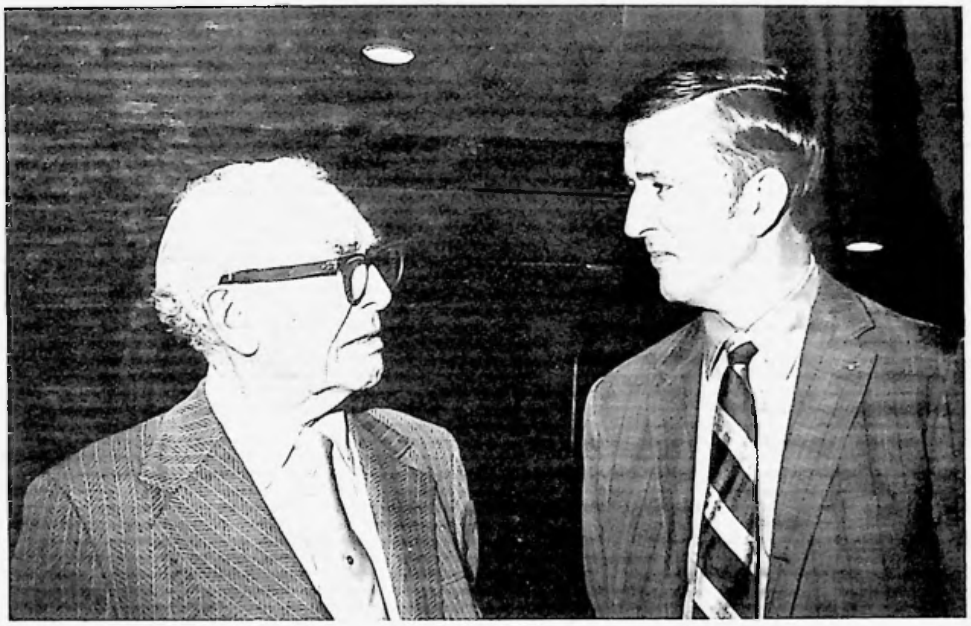
The "Updater" has been presented to more than 2,000 students since its kick-off last year [Aug. 1971 PILOT, page 9]. It is now a part of every AOPA ground school clinic; some 80 are presented in various parts of the country each year.

The Updater Course consists of a full day of concentrated lectures that are illustrated with some 250 to 300 slides. From three to four top-notch ground school instructors pool their talents to give the course. During a recent presentation in San José, Calif., the room was overflowing with non-preregistrants. Instructors included Al Passell (AOPA 202221), John Peck (AOPA 418630) and Don Sundin (AOPA 122419). Sundin presented AOPA's first "Pinch-Hitter Course" at the 1963 Plantation Party in Palm Springs, Calif., and has been working with the AOPA Air Safety Foundation ever since. In his "spare time," Sundin manages the Licking County Airport in Newark, Ohio, which has about 50 aircraft based there plus an active flight school.

The new Updater Course initially was designed for aviation's "retreads," but it has proven extremely valuable as an overall briefing for almost any person engaged in any phase of aviation. The program is basically divided into four lectures covering: (1) airspace and charting; (2) aircraft performance and operations to and from airports; (3) engine operation and nav/com techniques; (4) weather briefing and "where accidents happen."

An analysis of the nearly 50 "students" who attended the recent San José course produced a fair cross section of types of persons for whom the Updater Course was initially developed. Two examples: seventy-six-year-old M. L. Bramson soloed a French Nieuport in 1920, flew as a professional skywriter in SE-5As between wars and was a British ferry pilot during World War II. After more than 5,000 hours in the air, he flunked a physical and had not flown for 10 years. He finally convinced FAA doctors he was as good as new, passed their examinations, and is back flying

Updater Course at San José, Calif., drew a full house, and then some. PILOT staff photos



Seventy-six-year-old "Updater" M. L. Bramson (AOPA 98057), reviews point on flying into Terminal Control Areas (TCA) with AOPA's Don Sundin (AOPA 122419).

solo again. The Updater Course was tailor-made for him;

Mardo Crane (AOPA 82764) started flying in 1933 at the suggestion of Amelia Earhart. She helped found the "Powder Puff Derby" in 1947 and has just published a fictionalized account of the annual women's cross-country race. The book, "Ladies, Rev-Up Your Engines," makes good reading. [Book available from author @ $2.95; 3309 Santa Rosa Avenue, Santa Rosa, Calif. 95401.] Mardo was in the San José audience.

Fifteen of the "Updaters" were 50 years of age or older; 23 were over 40, while the youngest member of the group was 23. Individual flight time logged by the attendees ranged all the way from 60 to 7,600 hours with participants reporting from zero to 1,300 hours of actual instrument flying time.

Last actual flying for several "Updater" students in the 48–57 age bracket dated back to World War II training. Don Sundin reports "about 10% of our participants are World War II 'replates.'"

Here's a quick quiz to find out whether or not you might profit by taking the Updater Course:

What do the following altitudes mean to you?—60,000 feet; 24,000; 18,000; 15,000; 14,500; 14,000; 12,500; 10,000; 1,200; and 700 feet. Answers are provided during the detailed discussion of the airspace.

Do you know an MEA from a MOCA? How are required IFR reporting points charted? What's the meaning of each of the various colored rings on your airspeed indicator? Answers to such questions represent only a fraction of the total information you can glean by taking AOPA's Updater Course.

[Don't know all the answers? Flip to page 58.—Ed.]

During a discussion of nav/com equipment at the San José Updater Course, Sundin listed the equipment he would purchase, as well as the order of priority for obtaining the equipment, for his own type of flying. This is the list: 360-channel omni transceiver; marker beacon receiver; Automatic Direction Finder (ADF); transponder; autopilot; second omni; and then a DME (Distance Measuring Equipment). He proceeded to explain justifications for each piece of equipment and the reasons for his order of priority but he also pointed out that pilots in other parts of the country might have a different order of priority for a variety of reasons.

Updater Course "students" were urged to ask questions—during coffee breaks—on anything that might have gone unanswered during the lectures. The program is so tightly knit that there is no extensive "hangar flying" by either students or instructors during the lectures themselves because of the need to complete all scheduled discussions. When the Updater Course program calls for only 20 minutes each on radio communications and radar services, and another 20 minutes to answer, "Is your flight plan really legal?," there isn't much time for swapping flight experiences. So, "hangar flying" is kept to a minimum to allow participants to get the most information possible from the instructors. Whether you've been flying for 40 years or longer, like M. L. Bramson who once wrote "Lucky Strike" ads in the sky, or if you've just passed your private or commercial written with a score of 100%, there's much in the "Updater" that will be of value to you.

One reporter's opinion: The "Updater" is rated "GP" for anyone who flies. □

Skillful use of visual aids, such as this slide on carburetor icing, helps convey information needed to pilot today's aircraft.

Cutter Laboratories Aids in Medical Progress

A new type of heart-lung machine with dramatic, life-Bramson membrane heart-sult of medical progress right development of Pacific Medical Center in San Francisco, Hallikainen Instruments in Richmond, and Cutter Laboratories Inc. in Berkeley. It's named after its designer, M. L. Bramson, a consulting engineer with Pacific Medical Center.

This new heart-lung machine promises to increase greatly the time that a person can be maintained on extra-corporeal circulation. It was recently used for 75 hours on an accident victim who had suffered a ruptured aorta. The victim later recovered — the first time in medicine that a human, kept alive by artificial means for so long, made a complete recovery.

A HEART-LUNG machine consists of a pump, which duplicates the pumping action of the heart, and an oxygenator, which duplicates the action of the lung, i.e. supplying oxygen and removing carbon dioxide.

With the introduction of the heart-lung machine in 1953, open-heart surgery was made possible. The patient's blood could now be diverted away from the heart, into the machine, allowing the surgeon to operate directly on the heart.

One of the operative procedures made possible by open-heart surgery was the replacement of defective natural heart valves by artificial valves. It was at this time, with the production of artificial heart-valves, that Cutter Laboratories entered the new field of human prosthetics.

AS VALUABLE as the early heart-lung machines were, however, they had one serious limitation. Patients could not be kept on the machines for much longer than five hours. If they were, serious damage to the blood resulted. his not only restricted surgical procedures, but meant also that the machines were of little use to those patients whose lungs needed a longer "rest" in order to recuperate.

It was soon discovered that the damage to the blood resulted from the direct contact between the blood and oxygen over a large surface area. What was needed was a "lung" in which gas exchange could be achieved without direct surface contact, just as in the human lung.

SO THE SEARCH for a better heart-lung machine got underway, led by Engineer Bramson. Hallikainen Instruments of Richmond cooperated in the development of the hardware — the pump and chassis, while Cutter engineers were concerned with the fabrication of plastic parts for the lung-membrane, as well as its assembly.

Cutter's reputation had long been established in the medical profession for the fractionation of human plasma (the liquid portion of the blood) into its life-saving components. It was this experience, plus the capability to produce and design biomedical equipment, which brought a surgical group, headed by Dr. Edward A. Smeloff of Sutter Memorial Hospital in Sacramento, to Cutter Laboratories with a design for an improved artificial heart-valve. Production of the Cutter-Smeloff heart-valve began in 1964.

Soon, the Berkeley company, in cooperation with other leading heart-surgeons, was producing a variety of artificial heart-valves.

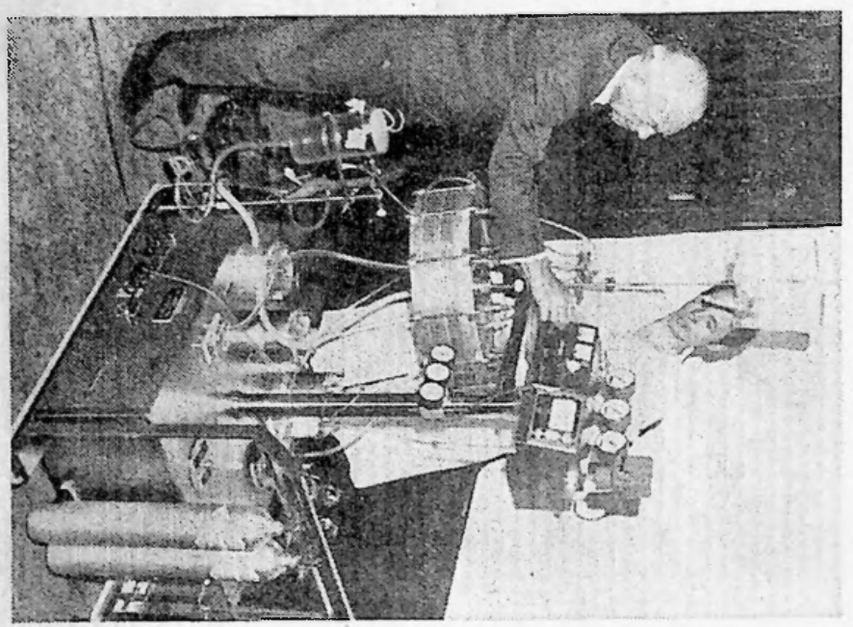
ALONG WITH the expanded production of artificial heart-valves came expanded research into other types of prosthetic devices. The first of these to be marketed were artificial knuckle-joints, made of silicone rubber and Dacron mesh. These were used to replace natural knuckles rendered useless by arthritis and other crippling diseases. Research on other artificial joints, including elbows and shoulders, continues.

The development of such artificial joints is due in large part to the ability of silicone rubber to remain resillient in the human body, without reacting with body tissue.

THAT SAME material, silicone rubber, proved to be a key material in the Bramson membrane lung. The distinctive feature of the new lung is a membrane, about five thousandths of an inch thick, made of silicone rubber, through which the blood is revitalized with oxygen in a gentler manner. Thus the damage to the blood which arose from direct surface contact is avoided. The improved design of the new membrane lung brought about other advantages also, including the need for a smaller volume of blood to prime the machine, as well as better overall blood volume control.

The full potential of the Bramson membrane heart-lung machine may not yet be realized. Thus far, in the developmental phase of the machine, only accident victims have benefitted from it. But it also holds promise for those suffering from viral penumonia and respiratory distress, including emphysema.

YET, THOUGH the Bramson membrane-lung has proven highly successful, it must be noted that it is still a highly expensive and complicated machine, available at a very limited number of medical centers throughout the country. Naturally, work is underway to produce a simpler and less expensive model.



NEW HEART MACHINE — The Bramson membrane heart-lung machine is checked out by its designer, M. L. Bramson (left), and Dr. J. Donald Hill, a cardiovascular surgeon at San Francisco's Pacific Medical Center. The distinctive feature of the new machine is a membrane made of silicone rubber which revitalizes blood with oxygen in a gentle manner.

S.F. Sunday Examiner
July 18, '71.

A Machine Shows 'It Can Be Done'

DR. DONALD HILL, M. L. BRAMSON

One man is alive and well, and there's hope for more

By Norman Melnick
Science Writer

A team from the Pacific Medical Center here used a new type of heart-lung machine for 75 hours on a young man who was struck down by a drunk driver and dangled between life and death. He is well today.

Dr. J. Donald Hill, a Canadian heart surgeon, and M. L. Bramson, a Danish born, English reared medical engineer who designed the device, said yesterday it was the first time in medicine that a human, kept alive by artificial means for so long a time, made a complete recovery.

"It shows it can be done," said Hill, only 34 years old.

Nine previous times the Hill-Bramson team kept patients alive — once for as long as 10 days in Winnipeg, Monitoba — but none recovered.

Four died while still on the machine. They had irreversible lung damage. Five died of other complications — after their lungs had been repaired and they had been taken off the machine.

The distinctive feature of the Bramson machine is a silicone rubber layer or "membrane," as it is called — five - thousandths of an inch thick — that prevents blood and oxygen from making direct contact, just as in a human lung. If contact occurs, blood damage results.

Conventional heart-lung machines, which have been in use now since 1953, have not eliminated this problem. This complicates, sometimes drastically, open-heart surgery.

Imagine oil on water. That is direct contact. It is one of nature's laws that blood and axygen cannot touch without penalty. Now slip an unporous but absorptive material between the oil and water. This —roughly—is what the Bramson machine does: It permits diffusion of life-gvng oxygen in the blood through the silicone membrane.

Last May 4, while he was tinkering with his motorbike off a Santa Barbara street, a 19 year old youth was run over. He suffered a broken leg, broken pelvis, a mangled knee and a ruptured aorta, the body's main artery.

Surgeons sutured the artery that night. Then three days later the youth's lungs "fell apart," as Hill put it. They filled with fluid and became a "wet old sponge rather than a fluffy new one." Breathing became extremely difficult.

As the situation grew desperate, doctors at Santa Barbara turned to the medical school on the University of California campus at Irvine for advice. They were alerted to the Bramson membrane heart-lung machine.

That Sunday, May 9, at 7 a.m., Hill, Bramson, another doctor and two nurses were flown to Santa Barbara by the Navy with, of course, the Bramson machine.

Hill said the youth was watched for 18 hours "to see if there was any simple way to get out of the problem." There wasn't. The youth was suffering from what is called the shocked lung syndrome — a mechanism not understood by doctors but somehow related to a massive injury case.

After the 18-hour vigil, the youth was put on the machine which took over the work of his lungs.

For two days there was no improvement.

"Then on the third day," Hill recalled, "there was the most dramatic improvement we've seen."

At 1 p.m. on May 13, the 75th hour of by-pass, the Bramson machine was turned off.

The young man is in a convalescent home recovering from his injuries and completely lucid now after a long period of mental confusion. Hill is planning to write a paper on the episode for a medical journal.

Unlike other heart-lung devices, the Bramson model was built specifically to function over many days. That is its main value. The machine gives the patient's lungs a rest and the body's natural recuperative powers a chance to work. (It cannot be done with the human heart which usually after breakdown requires extended rest. An artificial heart, some say, is near at hand.)

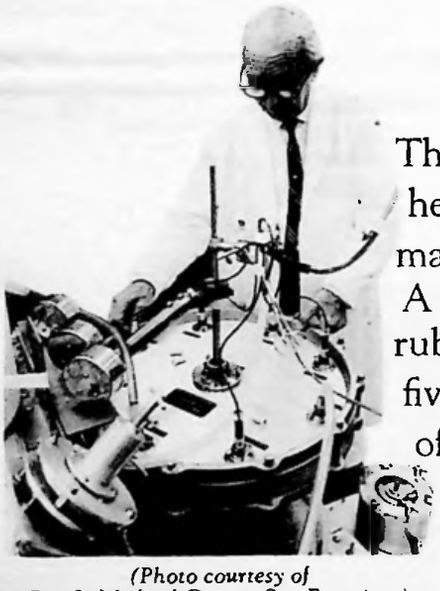
Bramson's machine is expensive, about $18,000, and with its many intricate surfaces it is extremely difficult to clean. At many centers in this country and abroad, work is going forward on the development of a "disposable" membrane heart-lung machine that can be mass-produced. It will cost less.

Bramson, who is 76, is working on his own "disposable" unit. Hill believes the membrane machine has great promise particularly in shocked lung cases which are not uncommon. Here the doctor is confronted with normal lungs that have suddenly and inexplicably gone haywire, and the appeal to him is that the condition is not irreversible.

Hill also sees promise for the machine in cases of viral pneumonia and of respiratory distress, a major killer of infants. Emphysema sufferers are subject to pneumonia and the membrane machine also has potential here.

The life-saving new heart-lung device costs like the devil.

Breathe easy. Your health plan pays in full.



(Photo courtesy of Pacific Medical Center, San Francisco)

The membrane heart-lung machine... A silicone rubber layer, five-thousandths of an inch thin, keeps blood and oxygen separate as in the lung. For the first time in medicine, this machine took over for the lungs of a critically-injured man for 75 hours until he achieved full recovery.

Each time a hospital enhances its medical capabilities, it takes on a costly new burden of equipment and staff. With Blue Cross you're protected because your benefits expand automatically as medical costs increase.

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This advertisement will appear in CTA ACTION October 8, 1971

ODe To BRAM

We like the way his balls are hung
on his metal dog the bells are rung
to him all praises should be sung
He's Saved ~~Sooooo~~ many a heart
and many a lung!

JUNE 1974

A Sweetbriar Kastle original

IMS NEWS

The first private owner of a Spitfire in 1946, Bram commuted by plane from London to Exeter on business.

MOGENS BRAMSON: FROM SKYWRITING TO BIOMEDICAL ENGINEERING

Well-known at the Institutes for both his achievements in the development of heart-lung machines and as a good storyteller, Mogens Bramson's career has led him , he said offhandedly, "to do a variety of stuff."

The son of a doctor and authoress, Bram grew up in Denmark and later received his engineering degree in England where he began his career. Not all his jobs, however, have been in engineering.

As a young man he bought a World War I French reconnaissance plane and learned to fly in five days. Soon after, he joined the first skywriting outfit and travelled on jobs to Norway, Sweden and Denmark.

Skywriting was a novelty in 1923 and Bram was treated as a celebrity in the cities where he put on advertising campaigns. After his performance in Copenhagen, a newspaper reported the reaction of one Danish citizen, '"At least he can spell.'"

Before he could write words in the sky, Bram had to learn to mirror write. Skywriting is like writing on a window that the spectator sees from the other side. "I learned to mirror write by walking out the words in a field," he said.

Bram liked skywriting because of the demands it placed on the pilot's maneuvering skill. The writing quickly became illegible if the plane was not kept at a precisely constant altitude. He recalled with obvious humor, "On one occasion it became an unintentional obscenity visible for miles."

Bram has also tried mining in South America. After he and his engineering partner came across a report on a gold mine in Dutch Guyana, they met with the author. Immediately recognizing that the author was incapable of telling a lie, Bram and his partner set off for the interior of Dutch Guyana. The mine was rich. "You could pick up gold nuggets," he remembered. "Unfortunately, the approaching second World War made it impossible to raise capital to have the mine worked."

During the same time that Bram was a consulting engineer, Flt. Lt. Frank Whittle asked him to find financing for his idea of jet propulsion for airplanes.

Bram recalled, "He was a bright, young officer-pilot in the Royal Air Force, who seemed to know what he was talking about. This impression was somewhat qualified by the eyebrow raising improbability of his basic thesis that aeroplanes could be made to fly without propellers."

Nevertheless, he studied Whittle's proposals for two weeks. "I suddenly felt 'This must be done.'" Through Bram's efforts a firm of investment bankers agreed to back

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IMS NEWS

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SDI, FICA WAGE BASES INCREASE

This year, social security tax (FICA) will continue at 5.85% of your gross salary. However, this percentage will be applied to an increased taxable wage base of $13,200.

The State Disability (SDI) wage base has also been increased. In 1974 you will pay an employee contribution tax of one percent on an increased taxable wage base of $9,000 to finance the disability insurance program. The taxable wage base was $8,500 for 1973.

EDITH KEHOE

IMS was sorry to hear of the passing of Edith Kehoe last month.

Ms. Kehoe had worked as Dr. Harold Faber's secretary since IMS was established in 1959.

Prior to that time, she worked for Dr. Faber in Stanford University's Department of Pediatrics.

Ms. Kehoe was 90 years old and still working at the time of her death.

INTAKE PERIOD OF MULTIPLE RISK FACTOR INTERVENTION TRIAL FORMALLY UNDERWAY

The Multiple Risk Factor Intervention Trial (MRFIT) is fully underway at IMS. A staff of 35 physicians, social psychologists, dieticians, smoking cessation specialists, health counselors, group leaders, technicians and back-up employees including clerical, data editing and administrative personnel make up the San Francisco MRFIT, one of twenty such clinical centers located in large cities across the country.

The 8-year program, funded by the National Heart and Lung Institute, is a carefully designed and controlled effort to lower the incidence of coronary heart disease in a group of high risk individuals. The intervention effort consists of an integrated approach to the modification of diet in order to lower cholesterol levels, the cessation of cigarette smoking and the lowering of diastolic blood pressure through a standardized stepped-care therapeutic approach.

Individuals recruited to participate in the Trial are asked to commit themselves for a six-year period during which time they will either work with their usual source of medical care in order to lower their risk factors, or with the resources and staff of the MRFIT clinic to accomplish this goal. Both groups will be re-examined regularly to assess their risk factor and heart disease status.

Several IMS and hospital employees have already participated in the pilot and pre-test phases of the MRFIT, and the MRFIT staff has been grateful for the suggestions and advice of these volunteers.

Now that the intake period of the program is formally underway, regularly during the course of this program, there will be scheduled days for volunteers to enter the project by attending the Primary Screening Clinic.

Generally, this clinic is not located at IMS but travels to various sites around San Francisco, such as the Muni, the Transamerica Building, the Water Department, San Francisco State, Bechtel, Bank of America, etc., screening men aged 35 to 57 who are interested in the assessment of their risk factor status. At this screening, which takes only ten minutes of the participant's time, blood pressure is measured, blood drawn for a cholesterol determination and a few interview questions administered.

Over 2,000 men were screened by MRFIT between the February 14th kick-off and May 1st. On the basis of the risk factor values determined by the primary screen, high risk participants were invited to a more intensive screening at the MRFIT clinic. Here a participant has a pulmonary function test, a physical examination, a resting ECG, blood pressure measurements, venipuncture and, through the cooperation of the Radiology Department at PMC, a chest X-ray.

Participants who are willing to continue with the program and for whom there is no clinical or laboratory evidence indicating it inappropriate, are asked to return to the clinic for a third and final screening visit. At that time, each participant has an exercise ECG test, a dietary interview, a behavior pattern interview and discussions with various clinic staff concerning the nature of the MRFIT program and a participant's commitment to it. Those men who agree to enter the Trial are randomized into the usual care or special intervention groups and their six-year intervention program is undertaken.

The next issue of the IMS newsletter will describe more fully the all-important intervention phase of the MRFIT. Meanwhile interested employees who would like to visit the MRFIT facilities or volunteer for the Primary Screening may contact the Project Office at extension 2441.

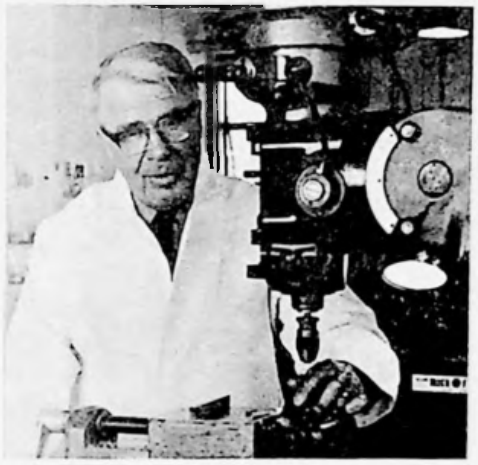
INNOVATIVE INSTRUMENT SHOP AIDS INSTITUTES' RESEARCH PROJECTS

Jack Shore

The IMS Instrument Shop, located in the Stern building, is almost a second home for Jack Shore, Elmer Johnson and Phillip Munkres. Both Jack and Elmer came to IMS in 1965, and Phil joined them a few years later. Before coming to IMS, all three had worked together as tool designers for an engineering firm in San Rafael. Clarence Barnes, a biophysicist who does occasional work on special projects, started here in 1970. A visitor to the Instrument Shop will not be surprised to find an atmosphere of teamwork and friendship among them.

Because innovation and invention are crucial to research, a basic function of the Instrument Shop is to make available to the various institutes the necessary tools that are not currently on the market. The Instrument Shop designs, develops, manufactures and maintains instrumentation using knowledge and skills in the areas of biology, chemistry, physics, drafting, engineering and metallurgy.

Some of their projects have included the TVSS vision substitution device, a pneumotachometer which accurately duplicates the air capacity of the lungs, and a contourograph which makes it possible to record EKG readings in a concentrated pattern.



Elmer Johnson

A project that the Instrument Shop is particularly proud of is the creation of an Ectopic Beat Detector for use in coronary care. Through the award of a Public Health Service grant, the Instrument Shop, with Jack as the principal investigator, spent two years developing a machine

Phillip Munkres

that is able to detect and signal any shift in the normal heart beat in a continuous electrocardiographic (EKG) monitoring. An important feature of the device is that it has a memory and is thus self-teaching. It has the ability to automatically select a normal heart beat and will, if necessary, indicate when there is an ectopic heart beat that is potentially dangerous to a patient. Further development of the detector includes making it easier for a nurse or technician to operate.

If you've never been to the Instrument Shop and aren't familiar with the kind of work that Jack, Elmer, Phil and Clarence are doing, why not give them a call, and give yourself a chance to discover what is happening in the various fields of research in which IMS is involved.

SKIVS SPONSORS INTERNATIONAL SYMPOSIUM IN STOCKHOLM

The Wenner-Gren Center Foundation and the Smith-Kettlewell Eye Research Foundation are sponsoring an international symposium on "Basic Mechanisms of Ocular Motility and Their Clinical Implications."

Attending the symposium, which will be held from June 2-6 in Stockholm, are representatives from Italy, France, the United States and Japan. Representing SKIVS will be Drs. Jampolsky, Bach-y-Rita, Scott, Collins, Alvarado and Nakayama and David O'Meara.

A similar conference was held four and a half years ago in San Francisco.

SALARY ADVANCE

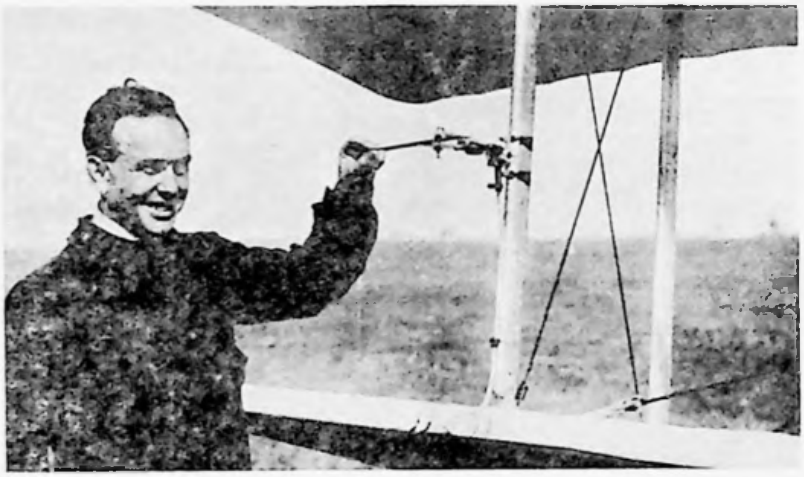
If you are planning to take a vacation and you need a salary advance, please notify personnel a full pay period in advance so that we can process your larger check through our regular payroll channels.

Thank you for your cooperation.

BRAMSON'S CAREER AS AN INVENTOR STARTED AT A YOUNG AGE

continued from page 1

Whittle's project on the condition that they receive a positive report on the proposal by another engineer. Whittle specified that he would allow only Bram to be that engineer. Even though it meant losing the normal rewards for finding finance, Bram agreed to do the report. "It pleases me to remember that I did so enthusiastically." Three years later the first jet engine was tested.



Bram, in 1928, demonstrating his anti-stall device for which he was awarded the Wakefield Gold Medal.

It is not surprising that Bram was able to recognize the worth of someone else's invention since he is also an inventor. One of his first engineering jobs was designing a synchronizing gear that made it possible for World War I fighter pilots to fire between the propeller blades. The superiority of this device gave British pilots an edge over the enemy in aerial dogfights.

Talking about his inventions, Bram added, "Going from the sublime to the ridiculous, when I was a small boy, my father and I invented a non-dangerous hatpin for ladies. In those days women wore large hats and used long pins, which were highly dangerous to other people's eyes, to hold the hats to the coiffures. Our hatpin was like a hyperdermic needle with a straightened spiral watch spring inside, so that when the pin had penetrated the hat and hair and come out again, the spring could be pushed out, and then it bent around and covered the sharp point."

Bram came to San Francisco as British Trade Advisor for the Pacific Coast region, and stayed on as technical advisor to a California millionaire. "During that time I met Dr. Frank Gerbode at a cocktail party. That was 17 years ago, and it transformed me into a biomedical engineer."

His life has been varied, but in one way it has been simple. "When I was seven, I knew I wanted to be an engineer and I really haven't changed my mind."

TRAVEL NOTES

On May 16, Elmer Johnson, Instrument Shop, left for a 2-month tour with his wife. The Johnsons will be travelling by boat to Great Britain and then flying to Scandinavia to visit family and friends in Finland. They will then continue on to areas in Estonia, Leningrad, Soviet Asia, Turkey, Lebanon and Cairo.

Ann Segerstrom, Accounting, also left for a vacation on May 16. Ann and her roommate are staying in warm, sunny Tahiti for two weeks.

David Fong, IHR, and his wife Adrienne, Personnel, will be taking a summer vacation in Europe starting May 31. They will be exploring Great Britain, the Netherlands, France, Switzerland, Italy and Greece.

BIRTHS

It seems that IMS is growing in more ways than one.

Julius Madey, SKIVS, and his wife, are the proud parents of a baby girl, Kristin Johanna, born on April 1. Julius and Gertrude had Kristin delivered at home and recommend it for all prospective parents.

Joseph Schlessinger, RDF, and his wife, Elizabeth, had a baby boy born February 8. Since this is their first, the Schlessinger's are finding that bringing up Daniel is a great new experience.

PROFESSOR GEORGE WALD, NOBEL PRIZE WINNER, SPEAKS AT IMS ANNUAL LECTURE SERIES

Professor George Wald and Dr. George Z. Williams enjoying the cocktail hour with a guest.

In honor of Professor George Wald, guest speaker at the IMS Annual Lecture Series and Nobel Prize-winning biologist, members of the Board of Directors, Senior Scientists and financial donors attended a cocktail party in the Board Room of the San Francisco Museum of Art prior to Professor Wald's lecture on "Life in the Universe".

"Though we find ourselves in a universe well populated with life, if one were to change ever so slightly, a few properties of that universe, life would change from being inevitable to impossible," said the lively and controversial Professor Wald speaking before a crowd of approximately 400.

In his closing remarks on the evolution of life in the universe, Professor Wald, a well-known critic of social issues who describes himself as "an angry old man", stated, "The very technology with which we found this degree of understanding about ourselves, that we are 4½ billion years old, is the very technology that enables us to easily destroy all human life."

Commenting on the statement that man has always had problems that seemed insurmountable, Professor Wald went on to say, "We have never had these problems before. We have never had those nuclear weapons to deal with before. All that hardware is put away to destroy mankind."

In the scientific community, Professor Wald is known for his creative work in vision research and for pioneer studies in clarifying the role of the visual pigments and the importance of Vitamin A in seeing. He is one of the world's foremost authorities on the biochemistry of perception. In addition to his work on vision, he is interested in the basic similarity of organisms on the molecular level.

Professor Wald has received many honors, including the Eli Lilly Award in biochemistry, the Lasker Award in public health, the Proctor Medal in ophthalmology and the Rumford Medal of the American Academy of Arts and Sciences. He is a member of the National Academy of Sciences and a Guggenheim Fellow.

Professor Wald lives in Cambridge, Massachusetts with his wife and children. He is an enthusiastic art collector, particularly of pre-Columbian pottery.

Dr. Frank Gerbode making introductory remarks at the 2nd Annual IMS Lecture Series.

DR. BACH-Y-RITA RECEIVES OPHTHALMOLOGICAL AWARD

Dr. Paul Bach-y-Rita, SKIVS, was awarded the Franceschetti-Liebrecht-Prize for an outstanding publication in the field of neuro-ophthalmology.

Dr. Bach-y-Rita personally accepted the award during the closing session of the International Congress of Ophthalmology, on May 31, in Paris. Professor Meyer-Schwickerath, president of the German Ophthalmological Society, honored Dr. Bach-y-Rita with a special laudatio

POSITION OPENING

CA Licensed Lab Tech To supervise quality control procedures and small staff of technicians in a mobile screening unit at various sites in the city. Venipuncture,blood pressure readings, centrifuging, record keeping, equip and supply ordering,etc. Constant public contact. Little routine lab work.
Salary- $900-925/month.

PAST TWO YEARS SEES TREMENDOUS GROWTH RATE AT IMS: STAFF INCREASES BY 40%

REGGIE HARVEY has joined the MRFIT project as a shipping clerk and assistant to the lab and data technicians.

Since Reggie has lived here all his life, it is no surprise that he is very much into the music scene that San Francisco is recognized for. Reggie belongs to a six-piece rock band called "Stratus" and spent one and a half years on the road before he started working at IMS.

ELIZABETH EVANS, who comes from Portland, Oregon, joined the laboratory division of IHR in December. As a laboratory technician she is involved in the analysis of the lipid content in blood samples from the MRFIT project.

After she graduated from the University of Oregon with a B.S. in medical technology, Elizabeth moved to San Francisco. She likes to horseback ride when she returns to her native state.

SUSAN GRUBE, MRFIT research assistant, is involved with an ancillary study in behavior pattern assessment.

It is believed that aggressive, hard-driven people are more prone to coronary disease than persons who live a more moderate lifestyle. With this idea in mind, Susan will be interviewing men with high tendencies toward coronary disease. She will carefully evaluate the context of their body movements, speech expressions and other reactions to determine whether the men have an aggressive or easy-going nature.

Susan has a degree in speech therapy from Marquette University. Prior to her work at IMS she was involved with the "Sudden Death Study" at Mt. Zion.

JON HIDAYAT, a technician in the lipid lab at IHR, relaxes by doing yoga after work at a nearby center. He is also taking a candle carving course.

Before Jon was hired in January, he had worked for other labs, mainly commercial ones.

He came from Indonesia to the States to study and plans to finish his course work for a B.S. in biochemistry at S.F. State.

In April, SHARON BENNETT joined the IMS staff as executive secretary to Ward Millar.

The daughter of an Army officer, Sharon was born in Oklahoma but lived in Germany and different parts of the States when she was growing up.

Before coming to San Francisco, Sharon worked for a medical research organization in Oklahoma City. She decided to move here because it was less costly than visiting the city every vacation.

In her spare time, Sharon practices karate and yoga and likes photography and writing.

JOYCE APPELBAUM, a health counselor with the MRFIT project, has been at IMS since January. She will be leading groups of men in intervention sessions where she and the other MRFIT counselors will help the participants modify their dietary and health habits.

Joyce has an M.A. in media from SF State and prior to her position with IMS, she was a media specialist in the Berkeley elementary school district.

Her interests include tennis, camping and batik.

ALAN FOWLER, instrumentation technician, is responsible for the maintenance and repair of bio-medical instrumentation for IHR. He will also be involved in the collaboration and design of machines used in clinical analyses, such as the auto-analyzer.

Alan, who has degrees in astronomy, physics and business, is currently studying at SF State for an M.A. in physics. In addition to photography and building telescopes, Alan is a wine collector and enjoys backpacking. At home, his two affectionate, woolly monkeys, Isadora and Jennifer, keep him company.

PAT PERUCHO, lab technician, is involved with screening potential participants for the MRFIT project.

Born and raised in San Francisco, Pat recently received a certificate in medical assistance from the College of California Medical Affiliates.

On weekends, Pat loves to go out and boogie.

JULIA COFFRON was hired as a nutritionist for the MRFIT project. As part of the group intervention session, Julia trains health counselors in nutrition and food modification. She is also directly involved in health counseling with the project's participants in an attempt to change the health and dietary habits of men with a high risk of coronary heart disease.

Before coming to IMS, Julia was an R.N. and just recently graduated from U.C. Berkeley in nutrition.

ESTRELLETA MONJE is a research technician with the MRFIT project where she does laboratory work that includes testing for glucose tolerance. Part of her time is also spent assisting in the screening of participants for the intervention groups.

Estrelleta has a degree in medical technology from Marquette University in Wisconsin. In her free time, Estrelleta enjoys bowling.

PAUL KELTZ's work as an electronics technician at HRI involves maintaining the patient monitoring system and designing new equipment to upgrade the performance of the system. He enjoys working with computers because there are always new problems to be solved.

At home he works on the stereo system that is taking over his living room. He likes plants and photography too.

Paul has been working for IHR since January.

LINDA BAKER, research technician with MRFIT, is involved with giving pulmonary, cardiology and exercise stress tests to the participants of the group intervention program.

Lynn, who previously worked at Presbyterian Hospital, also bakes low-cholesterol foods for the MRFIT participants who have been fasting for certain tests.

Lynn is originally from Florida. She enjoys Swiss raffia weaving.

JOHN PARKER has joined the IHR Central Lab as a laboratory technician. John, who is a part of the MRFIT project, will be doing analyses of the chemical make-up of plasma.

John recently graduated from U.C. Berkeley in biochemistry.

JERRY GILLESPIE has joined the IHR staff as a laboratory aide for the MRFIT project.

Born in Detroit, Jerry studied drama at the University of Michigan. Before coming to IMS, Jerry was in the Air Force and is still carrying out his reserves service by working one weekend a month at Letterman Hospital in the microbiology lab.

Jerry's interests are writing screenplays and dancing. His future plans include working towards a teaching credential in microbiology.

BALJINDER SINGH has joined the MRFIT staff as a nutritionist and health counselor for the group intervention program. Bali will be involved with identifying and facilitating changes in any nutritional and health problems that men with a high tendency to coronary disease may have.

Educated in India, Bali has a degree in home economics from the India Government Home Science College and a diploma in dietetics and public health and nutrition from the Institute of Home Economics in New Delhi. In 1971, Bali and her husband came to California where she received her M.A. in nutrition from San Jose State.

In her spare time, Bali makes candles and does needlepoint. She has also had her batik work exhibited.

Another addition to the MRFIT group of health counselors is MARGARET BURNS. In addition to screening potential participants, Marge will be involved with the group intervention sessions and private counseling.

Before joining IMS, Marge was a teacher for eleven years, working with adolescents who had learning disabilities.

In her spare time, Marge likes to be outdoors hiking, bicycling and backpacking.

HARUMI NAKAO a research technician with a B.S. in chemistry from Berkeley, has recently joined the IHR laboratory staff.

Before coming to IMS, Harumi worked at the U.S. Public Health Hospital and then transferred to IMS to work on the MRFIT project where she does chemical analyses of serum.

JULIE WHELLY does part-time secretarial work for Dr. Don Hill at HRI. Before coming here in March, she worked for the Development Office of PMC.

Julie is originally from upstate New York, but has been living in San Francisco for the past five years. She likes music, camping and reading. This June she will be graduating from San Francisco State University with a B.A. in the social sciences.

The project administrator for SKIVS' study on "The Influence of Socially Used Drugs on Vision and Vision Performance" is JUDY GOUGH.

Before coming to IMS, Judy had worked at Children's Hospital as the medical staff secretary. Here at IMS she is working with Drs. Adams and Flom and their research staff.

Judy, who has a degree in English from the University of Illinois, spends her free time reading and also enjoys her weekly dance and exercise class.

JOHN MILLIGAN, research assistant with HRI, has been hired to test the differential effects of freezing and thawing of cells. John, who is presently working on the separation of different cell types from rat bone marrow, explains that the ultimate clinical and practical application of the research will be preserving white blood cells during whole body radiation such as that necessary in the treatment of cancer.

John graduated from Dartmouth with a degree in chemistry and received his M.A. in molecular biology from Berkeley. He has taught at Sonoma State College, as well as the San Francisco Art Institute.

MARY DAVIS, is another member of the IHR staff involved with the MRFIT project. Mary keypunches the test results of the blood specimen analyses that come from the other MRFIT centers across the nation.

Prior to her position at IMS, Mary served in the Air Force for four years. Since she and her husband are newcomers to San Francisco, Mary spends most of her free time sightseeing and getting to know the city.

JAYE LOVE, a lab technician with the MRFIT project, takes blood pressure readings, draws blood and then separates serum from the blood by spinning it in the centrifuge machine. Jaye explains that the serum from the MRFIT participants is then sent to UC Davis and analyzed for cholesterol count.

Jaye, who studied medical assistance at the Bryman School, enjoys drawing and painting.

DAVID ALLAN, a research technician with a degree in chemistry from the University of Wisconsin, is involved with a project on urinary steroid profiles at IHR.

David has been in San Francisco for nine months and wants to get into some outdoor activities such as camping and backpacking this summer.

MICHELLE KOSTANIAN is a lab aide with IHR's chemistry division of the MRFIT project.

Born in Bulgaria, Michelle was raised in San Francisco where she received her A.S. in chemistry technology.

On weekends, she and her husband enjoy Armenian folk dancing.

Though SHIRLEY CHEW has been working in IHR's laboratory division since last September, she has recently switched from being a Public Health Service employee to the IMS staff. She will continue to work as a lab technician in the blood analysis lab for the MRFIT project.

Shirley was born in Canton, China, lived in Shanghai and Hong Kong, and came to this country when she was a teenager. Even though her son is only four, she is teaching him to read and write Chinese.

Shirley received her B.S. in chemistry from Berkeley. She also has a real estate license and occasionally helps her husband with his real estate work.

KAY HORNE, secretary in IHR's hematology department, assists with various office duties for the research staff.

Before coming to IMS, Kay was very active with volunteer work in the San Rafael school system.

Kay enjoys traveling and has most recently visited Greece and Turkey.

ROSE GOMEZ is the newest addition to the accounting staff. Born and raised in the Philippines, she and her husband have been in San Francisco for over three years.

Rose was educated at the Philippines' Women's University where she received a B.S. in business administration.

At home, Rose is kept busy by her nine month old daughter Rowena.

Last July, KYEE YEO was accepted for on-the-job training in clinical chemistry with IHR's Central Lab. For six months, he was part of the Chinatown English Language School Program where he worked half-time for IHR and studied the English language with the other half of his time. When the program was finished, Kyee accepted the opportunity to continue as a fulltime employee with IMS.

Kyee is working as a lab technician in blood analysis for the MRFIT project.

Originally from Burma, Kyee came to San Francisco a year ago, after completing studies at the University of Rangoon.

JACKIE POTTER, as a lab technician for the MRFIT project, draws blood from their participants and is currently being trained to operate the EKG treadmill.

Jackie is originally from Fort Worth, Texas and has been in San Francisco for two years. When she is not caring for her three year old son Dorian, Jackie sings gospel music with the "Voices of Frederick"

Another addition to the IHR staff is MINA HARKINS. Mina runs chemical tests on blood serums that come to IHR from the various MRFIT centers throughout the U.S.

Mina, who has a degree in medical technology from the University of Pittsburg, has been in the Bay Area since August. In her free time she likes to sew and macrame.

Hired in January as a receptionist for the MRFIT project, ANITA BOLOTIN is enthusiastic about her first job and San Francisco. She enjoys her job because she feels that the whole staff works together as a team.

Before coming to San Francisco, Anita was doing volunteer work in Denver. She wants to learn to play golf. She's already a skier.

ELAINE MILLER is the new study coordinator for IHR's Health Profile Program.

Elaine, who was born in France and brought up in the Orient, graduated from the California Institute of Art with a degree in dance. She is currently performing at Hayward College with a group called the Dancers Cooperative.

Elaine also enjoys running and plans to enter the Marin County Bay to Breakers race this month.

In March, shortly after completing his residency in neurology at UCLA, Dr. Kwei U was appointed a clinical research fellow at INS.

Working with Dr. Norris, he is investigating the relationship between ALS patients with a history of lead exposure and progression of the disease. Eventually, all the patient data will be collected in a computer system for statistical information.

Dr. U came to the States from Hong Kong in 1961. He received his undergraduate degree from Berkeley and his M.D. from the University of Wisconsin.

Besides his work, he enjoys cooking, music and building model airplanes.

MARY TORPEY has joined the MRFIT staff as a data technician. Mary handles the information that the health counselors and lab technicians get from the screening of prospective participants. The data goes into a computer which determines whether a person is eligible for the intervention program.

Mary has a degree in psychology from U.C. Berkeley and is interested in public health and social work.

KAREN REINHEIMER, research lab assistant in HRI, is working on their alpha$_1$-antitrypsin study. It is believed that alpha$_1$-antitrypsin inhibits the amount of enzymes in the body. Significantly low levels of the inhibitor are often associated with emphysema because an unregulated amount of enzymes can destroy lung tissue. At this point, Karen has been labelling the alpha$_1$-antitrypsin with radioactive iodine in an attempt to follow the metabollic changes of the inhibitor and thus find the optimal conditions under which the alpha$_1$-antitrypsin will work most effectively without damaging body protein. Eventually this study holds the possibility of replacement therapy whereby people who have the inhibitor deficiency can be given alpha$_1$-antitrypsin.

Karen received her degree in chemistry from Berkeley and later earned her M.S. in physical chemistry from S.F. State. She is currently on a leave of absence from UCLA's doctoral program in physical chemistry.

Born and raised in San Francisco, Karen enjoys volleyball and jogging and is also taking singing lessons.

LISA BAKER recently joined the personnel staff where she is assisting in job interviewing, employee orientations and personnel research.

Before coming to IMS, Lisa lived in Sao Paolo, Brazil for 2 years where she taught second-graders in an American school.

Originally from Washington, D.C., Lisa has a degree in art history from George Washington University. In her spare time, she likes to shop for plants, attend art shows and go camping.

In addition to RDF's general office duties, SHELLEY SCHANFIELD also does keypunching and eventually hopes to become involved in computer programming.

Shelley, who studied psychology at Mills College, also hopes to find some time for flute lessons.

GEORGIA WHITMER has joined HRI's extra corporeal membrane oxygenation studies. As a research nurse, Georgia is involved in testing the responses of acute respiratory insufficiency patients to the artificial lung.

Georgia worked in Presbyterian's cardio-pulmonary unit before coming to IMS. She has a nursing degree from Hollywood Presbyterian School of Nursing.

A music student at S.F. State, BARBARA MAGGIO is a part-time secretary for Dr. Ian Carr, HRI. She is working on her master's degree in music history and hopes to teach eventually.

From San Diego originally, Barbara skies and goes to concerts in her spare time.

PEGGY BIERER has joined the research staff at SKIVS as a technician. She is studying the eye muscle movements of cats and has been assisting in their surgery.

In addition to camping, Peggy enjoys glass bead crafts and would like to learn how to weave free-form wall hangings. Peggy has a degree in psychology from the University of Pittsburgh.

POSITION OPENINGS

Res Lab Asst Will assist senior investigator of research project. Work will involve preparing tissue for electron microscope--staining, sectioning, embedding; developing and processing film in dark room. Will participate in site visits and publications. Potential opportunity for working on independent project.
Salary - $905/negotiable
Min Qualifications: BA/BS with long applicable experience or Master's degree. Must have exp. with electron microscope and tissue preparation. Must be able to work independently.

Secretary Heavy typing from handwritten copy or stenorette transcription of grants, manuscripts and correspondence. Extensive xeroxing, filing, answering telephone and other misc. office tasks as requested. Also helping in preparations for various official functions, such as site visits, luncheons.
Salary- $614-632/month
Min Qualifications: Accurate typing of 70wpm. High school diploma and completion of accredited secretarial course plus prior experience or an equivalent combination of education and experience.

MEDICAL WORLD NEWS
May 19, 1972

Nine days on a membrane oxygenator

Surgeons at Presbyterian Hospital of Pacific Medical Center in San Francisco have used partial extracorporeal bypass for up to nine days to try to manage desperately ill or severely injured patients through acute respiratory insufficiency. The score to date is only three survivors out of 15 oxygenation cases, but another six patients were deemed to have pulled through their lung crises, only to die from other causes.

Dr. J. Donald Hill and his colleagues were emboldened to try prolonged heart-lung assist because they had a membrane oxygenator capable of treating patients' blood with so little hematologic trauma. Standard bubble- or disk-type oxygenators lead to far more trauma when used for more than six hours, the team observed. Hemorrhage is the procedure's biggest risk, and heparinization must be kept at the lowest effective clot-preventing level.

The essential feature of the low-trauma machine is that the gaseous oxygen never comes in contact with the blood; the O_2 instead diffuses through a silicone rubber membrane that imitates the membranes of the natural lung. The "Bramson lung" used by the San Francisco team also has automatic constant-volume control and a built-in exchanger to warm the blood as it is oxygenated. And with the partial bypass methods employed, 30% to 40% of the patient's blood can be pumped by his heart. Thus he retains a natural pulse.

The lung was designed in the 1950s—for open-heart surgery—by Danish-born, British-trained engineer Mogens L. Bramson. Bramson, 76, is consultant to Presbyterian hospital. He devised a pair of membranes to contain the blood, sandwiched between oxygen-bearing passages that are in turn suspended between water matresses—the water being warmed by circulation through a heat exchanger. Fifteen of these sandwiches form a manifold.

So well did this membrane device work experimentally, and in more than 500 cases in the OR, that Dr. Hill and his team turned to the new use in 1967. The rationale is to buy time for damaged lungs to heal. The criteria for placing patients on prolonged bypass, Dr. Hill told the American Association for Thoracic Surgery at its 52nd annual meeting in Los Angeles this month, are:

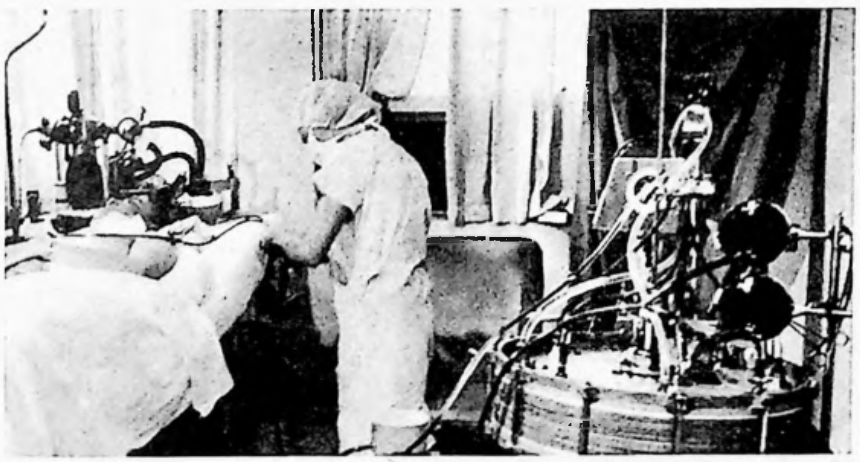
- An arterial oxygen pressure persistently below 35 mm Hg despite maximum respirator support, or
- Progressive signs of central nervous system deterioration due to hypoxemia, or
- Evidence of persistent cardiovascular deterioration due to hypoxemia.

The nine-day patient was a 17-year-old girl who had pulmonary edema, aspiration pneumonia, and massive bilateral pneumothorax after taking an overdose of barbiturates. Her lung function improved the first six days on bypass but she was taken off when progress ceased. She died two hours later of respiratory failure.

The three survivors were maintained on the machine for 44 hours, 75 hours, and five days. The five-day patient, a 19-year-old who sustained a severe fracture in a 50-foot fall, had fat emboli in the lungs, kidney, and brain. In a coma for five weeks, he has since recovered.

The 75-hour perfusion was performed at the Santa Barbara Cottage Hospital after the San Francisco team flew down in a Navy plane with the Bramson lung aboard. Santa Barbara doctors had given up hope of saving a 24-year-old man with shock lung syndrome. He had sustained multiple trauma when hit by a car.

Like the previous eight patients in the series, he was cannulated by the femoral vein to femoral artery route. The Hill team believes this is superior to vein-to-vein bypass—used in the first six patients—because they have measured a higher average increase in systemic oxygen saturation with the V-A route while the flow of blood to the lungs is decreased. ■



Designed by engineer Bramson (left) for open-heart surgery, device gives damaged lungs a rest while sparing red blood cells. One of three survivors was on it five days.

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LETTERS TO THE

'That's Not Amnesty'

Editor — Six years ago, at the age of 19, my son Paul was inducted into the U.S. Army after having been denied his request to be classified as a conscientious objector. Twice during his year in the Army he applied for discharge because of his beliefs as an objector to war and killing. Both times his requests were denied. He deserted to Canada and has lived there for five years.

Under President Ford's plan Paul can now return to the United States and be allowed to serve two years in work similar to that which he would have done as a conscientious objector. The present plan is purely vindictiveness, not amnesty.

I am not unaware of the anguish felt by those whose men were killed or wounded in Vietnam. My first husband was killed at the Anzio beachhead in World War II. Not all families of those killed in Vietnam are punitive to war resisters. There is a national organization called Gold Star Parents for Amnesty.

The war resisters and the participants in the Vietnam war were both victims.

Let us move on to reconciliation with all members of our country and work actively for peace.

VIRGINIA CUNNINGHAM
San Francisco.

A Paltry Crime?

Editor — Mrs. Clare Booth Luce makes a persuasive defense of President Ford's decision to grant an unconditional pre-indictment pardon to Mr. Nixon, and of the implicit abandonment of all Watergate-connected prosecution against him.

She justifies the pardon by an eloquent analysis of his sufferings, concluding that he has already been punished enough and that submitting him to trial would only have proved that "revenge is a stronger force in our political life than compassion."

She bases this reasoning partly on the premise that the crime in question is the relatively paltry one of "obstructing justice." But, if this is done by a man at the very summit of power, who has sworn to enforce justice, is it really still only a paltry crime?

And is the fact which she emphasizes, that in this country 95 per cent of such crimes go unpunished, really relevant? Or should this perhaps rather be considered a reflection on police efficiency? (Ironically, Mr. Nixon's tapes have made it very clear that he regards being found out as his real "mistake.")

Lastly, there are two special features in this tragic story which tend to inhibit an overriding public compassion: One is the monumental arrogance of power shown by Mr. Nixon (and "all the President's men"), and the other is his ordering the secret and illegal massive bombing of Cambodia at the very time when Congress and the people were assured that its "neutrality" was being respected. What about Mr. Nixon's compassion for the victims?

M. L. BRAMSON
San Francisco.