At the beginning of the last decade, President John F. Kennedy made a commitment to the American people that we would place a man on the moon by the end of the 1960's. That commitment became a reality through the ingenuity of the aerospace industry and the public commitment of the Federal Government when, in July 1969, man landed on the moon . . . and returned safely to Earth.

But as the Apollo efforts moved toward their ultimate success, our country became more aware than ever of the need to create a better society here on Earth . . . as well as to explore the mysteries of outer space. It makes no sense that while our country can send men to distant planets . . . while we can build planes that traverse the globe in short spans of time . . . that we can still allow our children to breathe polluted air . . . drink dirty water; . . . that we can still allow hunger and disease to exist here in America.

Today, as before, we again stand in need of a commitment: a commitment that will enjoin the kind of leadership and talent that can identify crucial tasks and pinpoint meaningful time scales so that the resources of the Federal Government and the unique managerial talents and industrial skills of the aerospace industry can be put to work . . . full time . . . on the many problems that confront us today here in America.

Thus far, we have been unsuccessful in transferring these talents and resources to an attack on new problems based on new priorities. We need to create the type of alliance that will enable these unique human and scientific resources . . . the envy of the world . . . to be put to work on a broad new range of problems.

One of the most crucial ingredients in any attempt to revitalize our aerospace industry is leadership; . . . leadership here in California from industry itself and leadership in Washington in the Congress and the Senate.

The facts are clear. The aerospace industry has indeed provided much of its own initiative in an attempt to widen the job horizons for its employees but there has been an appalling lack of effort on the part of California's Senior Senator in assisting this lagging and crucial area of our State's economy.

A federal contract once every two or three years does not mean economic survival for the average working man in our aerospace factories. It does not mean job security for members of the management team or the scientists who are now

beginning to join the ranks of the unemployed. Complete dependency on Federal defense contracts means a slow death for an already dying industry.

In his six years in the United States Senate, George Murphy has not provided these people . . . this industry . . . with a single ounce of initiative in attempting to focus on new problems and new priorities; . . . in an attempt to put the aerospace industry to work . . . full time . . . on the human problems that could be solved with their talents. George Murphy has not come forward with a single proposal as to new directions and goals for the aerospace industry that would help them in the decade ahead. At a time, when the unemployment lines are being filled with people from our aerospace plants, . . . George Murphy has remained silent.

Today, unemployment in our State stands at 7%. The national average is 5.5%. To many people, these are merely numbers . . . but to more than 500,000 Californians, it means the absence of a job and a steady wage. The economy of Southern California depends to a large extent on the stability and the economic well being of our aerospace and related advanced technology industries.

But within the last month there have been another 2400 aerospace workers who have lost their jobs in Los Angeles County alone. And there are many more who are left wondering with the thought of unemployment; . . . not knowing when it will come . . . or for how long. These people do not need promises . . . they don't need political platitudes; . . . they need jobs.

The aerospace industry needs the leadership from our government and our elected officials that will return the challenge, excitement, and opportunity for accomplishment that Apollo provided. The aerospace industry needs adequate funding in a number of new program areas. They need a reduction in the bureaucratic red tape that has become tradition in many Federal agencies. They need the kind of joint leadership that will enable them to define specific projects with clearly defined technological goals.

Our domestic problems are too great . . . our human and scientific resources too skilled . . . to have to wait any longer for a start towards solutions.

California must lead the way. Specifically, I propose that efforts be made to implement Federal grants for research and development programs in the following areas -- Problem areas which the aerospace industry is capable of solving:

Crime Control: The problems of controlling and lessening the violence that has wrecked our cities and streets within the recent past is one of growing concern to all Americans. There are many ways in which technology can help; . . .

in speeding up the evaluation of evidence to clear the innocent as well as to apprehend criminals; . . . in developing practical and humane methods of crowd control so that tragedies such as the death of Reuben Salazar need not be repeated; . . . to increase both the mobility and the effectiveness of law enforcement personnel; . . to assist in the computerization of our Federal court systems; . . . and to assist in the modernization of our local courts.

This requires a commitment on the part of the federal government to delineate an overall program aimed at designing an effective and modern approach to the problems of crime control and reduction. It requires both adequate funds and authority for a single Federal agency to direct an intense and balanced development effort, not simply the returning of funds by the Federal government to the states for diffuse and uncoordinated expenditure. No such agency exists at present, despite a budget of nearly 300 million dollars for the Law Enforcement Assistance Agency.

Mass Transportation: The problems that confront our cities with regard to the transportation of vast numbers of residents who glut the freeways every day; . . . the lack of urban mass transportation systems . . . the problems of smog and congestion are, again, clear indications of the inability of government to focus adequate resources in a problem area. The aerospace industry possesses the knowledge and the technical skills to contribute effectively and meaningfully to the establishment of more efficient, cleaner and humane transportation systems, but will not be able to do so until adequate funds and authority are placed at the disposal of a single federal agency.

Flood and Fire Control: The aerospace industry must begin to look at the dual problem areas of flood control and brush fires which can completely disrupt the normal course of events in our lives. There exists within the framework of our aerospace industry the capacity to deal more effectively with both of these problems. The property damage . . . in the hundreds of millions this year alone . . . warrants a significant effort at producing newer methods of detection, control, and minimizing resultant damage . . . all of them based on a systems approach to the problem. Yet the total annual fire research budget of the U.S. Forestry Service still is less than 4 million dollars to meet the needs of the entire country. Both the necessary funds and agency

authority must be established by the Federal Government if aerospace and other industries are ever going to be able to provide new tools and procedures.

Health Services: And lastly, the problems of health care and the delivery of adequate and modern health care services to persons in need of them is one of growing and tragic proportions. Traditionally, the emphasis of mode in medicine has been on the disease . . . not in health care. We need to accept the objective of keeping our population healthy . . . not just treating illnesses as they arise. Computers and related information processing equipment can radically improve the quality and availability of existing medical treatment.

1. We must make the total accumulated medical data concerning both techniques for cures and preventions available quickly to hospitals and doctors in any area of the country.
2. We must utilize the scientific techniques of the aerospace industry to speed up and make less costly routine laboratory testing.
3. We must improve and make more effective the clerical aspects of our Medicare and State Medicare programs.

These are but four areas. There are many, many more areas of critical need. It is up to us to implement a new partnership; . . . one based on the real and human needs of our society and not dependant on the unsteady and limited needs of the Pentagon. We must make the effort so that a combination of the public resources of the government and the private skills of the aerospace industry can be forged together in an attack on the problems that surround us today here in America.

Industry would prefer not to be shaken up at all.

"Technology has become a dirty word"

Small amounts out of basic research. -> a few ind. contracts.

Health Services Technology

MS/GLC
people sniffers
Defoliation

Laboratories for searching, preventive diagnoses
for data collection and analysis of
epidemic outbreaks
(Automated chemistry & other blood tests)
of much deeper sophistication than now. Compare "preventive maintenance".

Hospital facilities and system organization
Patient monitoring
Drug administration and safety
Paper work
Efficient use of personnel

Assisting the physician
Information / communications
Patient Records
Local disease outbreaks - info.
Professional & assistant education
Research in computerized assistance to diagnosis
Patient medical history data.
Family data for familial disease

Therapeutic devices
Artificial organs: kidney, heart, vision + hearing
Comfortable + efficient supports + braces - body mold
for ubiquitous back problems.

DEVICES:

Drug delivery to target organs; self-monitoring levels

Cleaning the blood: extra corp. act. kidney

Tissue matching

New methods of nuclear medicine

safe use of X-rays and other rad'n

automated picture analysis.

X-rays; Pap smears....

ENVIRONMENTAL HEALTH.

Safety testing of drugs + food additives

Evaluation of hazards of radiation from nuclear energy

Env. poisons — lead, DDT will be succeeded by many unknowns

NUTRITION

Evaluation of malnutrition (1/3 of pop'n) and its causes and remedies.

New foods to correct it: economy, taste, etc.

HYGIENE and HEALTH Education

The HEALTHY CITY: System design

→ Mass Transport.

→ Earthquake hazard; existence; prediction.

Aerospace is system management, not m.e., e.e. skills

R+D: Crime Control + PREVENTION

Evidence - speed evaluation
↙ courts, fair sentencing

Personal ID. (Fingerprint).

- Computerization* of the court

* dirty word

Crowd control

NOT JUST MATTER OF TECHNOLOGY!

CIVIL COMMUNICATIONS.

Rehabilitation

- Surveillance and apprehension

Assurance of apprehension is greatest deterrent.

  - Balance with protection of privacy as a legal right so innocent have nothing to fear.
- Training and selection of law enforcement officials

Tracing of weapons.

Replace the paralysis of action against the guilty by the redress of the innocent as the way to protect civil right!