

type. I believe the gentleman will find the proviso as now contained in the bill is very satisfactory to the Air Corps. I believe there are 13 four-motor bombers on order. They have asked for no more, and this is entirely satisfactory to them.

Mr. WILCOX. As a matter of fact, would the elimination of this clause in any way interfere with the procurement program of the Army?

Mr. SNYDER, of Pennsylvania. It might be construed as an expression of willingness for the Army to ignore the procurement program upon which the appropriation recommended is based.

Mr. McFARLANE and Mr. MAGNUSON rose.

Mr. SNYDER of Pennsylvania. Mr. Chairman, I yield to the gentleman from Texas.

Mr. McFARLANE. Is it not true that the phrase which was placed in the bill several years ago was to stop the further purchase of these "sacred cows", or, as we called them in the Naval Affairs Committee, the "admiral's taxis"?

Mr. SNYDER of Pennsylvania. Yes; planes of any type other than combat.

Mr. McFARLANE. I think it is a wise provision and ought to stay in the bill.

Mr. SNYDER of Pennsylvania. I now yield to the gentleman from Washington.

Mr. MAGNUSON. Is the restriction stated by the gentleman on yesterday limited to the purchase not of what the gentleman from Texas mentions, but the regular war planes of the four-engine bomber type?

Mr. SNYDER of Pennsylvania. There is no limitation in this bill. The gentleman cannot cite any limitation upon the procurement of four-engine bombers.

Mr. MAGNUSON. No; but I was wondering if the gentleman's remarks yesterday in which he stated he deemed it not advisable to purchase more four-engine bombers were directed at a certain airplane factory in my district, which is the only airplane factory that manufactures such planes—Boeing, in Seattle.

Mr. McFARLANE. Oh no; the gentleman is badly mistaken about that.

Mr. MAGNUSON. I am just clearing the record. Then the gentleman answers my question by saying no.

[Here the gavel fell.]

The CHAIRMAN. The question is on the amendment of the gentleman from Florida.

The amendment was rejected.

Mr. McFARLANE. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I think the Committee is very much in order in including this provision in the bill and in defeating the amendment we just now voted on.

That amendment, or a similar one, has been in several previous bills and is working satisfactorily. The provision in the bill which the amendment of the gentleman from Florida [Mr. Wilcox] would have eliminated was inserted several years ago by the gentleman from Mississippi [Mr. Collins]. This provision stopped the further useless and wasteful expenditure of funds for the purchase of "generals' taxis" in the Army and "admirals' taxis" in the Navy.

AIRPLANE SINKS WARSHIP

My particular point in rising to speak at this time is to call the attention of the House to the headline in this afternoon's paper, which shows that a rebel warship was sunk by an airplane bomber off the coast of Spain, and to again point out the weakness of our aircraft procurement system and the effect this monopolistic system is having on our country. In doing so I want to pay proper respect to a little-appreciated prophet, the late Gen. William Mitchell, who repeatedly called the attention of the different committees of the Congress to the effectiveness of airplanes in warfare, and particularly demonstrated to our country how easily and effectively airplanes can sink any kind of warships. The Navy Department, to the best of its ability, has challenged from time to time the effectiveness of war planes in the sinking of battleships. This paper—today's Washington Evening Star—shows a picture of the battleship that

was sunk off the coast of Spain by bombing planes. It was one of the larger battleships of one of the Spanish navies, a vessel carrying some 10- or 12-inch guns, as well as anti-aircraft guns and other equipment.

MONEY SPENT FOR OBSOLETE EQUIPMENT

I also wish to call the attention of the Members to the enormous amount of money we are spending for aircraft, as shown by the hearings at pages 540 and 541. Here it will be noted that for aircraft purchases and the necessary equipment and accessories that go with aircraft for the past 5 years we have expended for the Army some \$344,000,000 and for the Navy some \$320,000,000.

This bill, if I read it correctly, carries about \$120,000,000 for new equipment. The Navy bill carried a similar amount, or at little bit less, and if you will read the Aircraft Act of 1926 and then study the method of procurement of both the Army and Navy Departments you will find they are not following the strict letter of the law in aircraft procurement and that little or no competition is being had in such procurement.

During the last Congress this House appointed a committee to investigate cross-licensing and patent pooling and under the very able direction of the gentleman from New York, the Honorable W. I. SROVICH, chairman of the Patents Committee of the House, this committee for several weeks went carefully into this matter. I was appointed general counsel for this committee and had the opportunity of receiving firsthand information as to how the giant monopolies of this country have been able to build up and perpetuate same largely through their monopolistic patent rights granted under the patent laws of this country. Then, through their cross-licensing agreements, we found how they have been able to control most of the major industries of this country. I hope the membership of this House will find time to read the three-volume report of this committee's investigations and recommendations in order that we can bring forth and enact legislation that will stop this giant Government-given monopoly that has done so much to perpetuate the strong at the expense of the weak.

Recently the Honorable Robert H. Jackson, Assistant Attorney General of the United States, in a speech made this significant statement:

While the Nation has forbidden monopoly by one set of laws, it has been creating them by another. Patent laws, valuable as they may be in some respects, often father monopoly. Unless we are prepared to reconsider the conditions upon which we will extend patent protection, we can have no consistent antimonopoly policy.

While the country has forbidden monopoly, it has also been subsidizing it. Monopoly has had tax advantages that have aided its rise. While the sale of a small business to another who wished to continue it as such would be subject to a capital-gains tax, if it were absorbed by a big business, the matter could be arranged in the form of a tax-free reorganization. The tax-free reorganization privilege has been a powerful incentive for the concentrating of business. The advantage in single transactions, at the cost of the Treasury, has often exceeded the whole annual appropriation for antitrust enforcement. Enforcement has been and is inadequately financed.

Moreover, the privilege of paying dividend profits free of tax from one corporation to another operated as a subsidy for the holding companies one of the most favored forms of creating and operating monopoly. The recent repeal of this privilege and the substitution of an intercorporate dividend tax has already proved highly effective in dissolving holding companies, and undoubtedly an increase in that tax would prove an automatic discouragement of that particular type of antitrust violations.

Only when the patent laws, the tax laws, the Securities Act, and all other laws of the United States are brought to exert their pressures toward the encouragement of small business, rather than toward its destruction, can we say that we have a national policy against monopoly.

Certainly the great masses of our people can find no fault with the above statement and the conclusions reached.

For example, there appeared before our investigating committee Mr. Burnelli, of Texas, a great aeronautical engineer and inventor, who told us of his experiences in trying to finance and manufacture his basic airplane patent he had received from our Patent Office, which, according to many aeronautical experts, seems to have many far-reaching advantages over any existing aircraft; and yet, because of the airtight cross-licensing and pooling agreements of the Air Trust, he was unable to make headway against this group

and was forced to go to England and other countries and license and manufacture his airplane before he could receive the proper consideration in this country.

The leading aeronautical engineers of the world, familiar with the Burnelli patents, express their hearty approval, among them being Dr. Alexander Klemin, in charge of the Daniel Guggenheim Institute of Aeronautics at New York University, who states:

The comparison of commercial transport airplanes of today with the Burnelli transport plane shows marked superiority in cabin capacity, space per passenger, cruising and top speeds, safety, and efficiency.

The present demand for performance should be fully satisfied by the high indicated performance of the Burnelli twin-engine plane with either air or liquid cooled power plants.

The engines are housed side by side in the leading edge of the airfoil body in the most efficient position as demonstrated by the N. A. C. A. in their extensive program. The housing of the engines in this position, coupled with aerodynamic efficiency of the lifting fuselage, makes the Burnelli design aerodynamically superior to conventional twin-engined or even single-engine designs.

The arrangement of the power plant and the attachment of wings and landing gear have led to simplification of design, which not only helps reduce weight but reduces construction costs and, what is more important perhaps to the air-transport operator, reduces maintenance costs.

Of equal importance is the fact that the cabin space per passenger is much larger than that of any conventional airplane today, and this is obtained while maintaining aerodynamic superiority.

Not only is cabin space important for transport passengers, but for carrying bulky packages, which comprise a great part of air-express service today. Very often the full pay load, in pounds, cannot be realized due to the space requirements of goods to be transported.

The advantage of the Burnelli principle of design should prove of even greater value in the "giant" long-range airplane of the future.

And as stated by Mr. Clyde E. Pangborn, world-renowned aviator:

(1) The engines are ahead of all structure. This is very important to safety in the event of accident, as the engines and their strong mounts would absorb a large degree of the impact, thereby protecting the cabin and passengers. The pilots' section, being located rearward and not in line with the engines, offers maximum safety for the crew.

(2) The propellers operate ahead of all structure and are not attached to the lighter outboard wings. This is an important safety factor in the event of propeller failure, as no parts would strike into the structure or cabin sections or affect any sustaining surface through the tearing loose of the engine mount.

(3) The propellers operate close together with no body in between, as is conventional. The advantage of this quality, though obvious for flying with one engine stopped, is immediately noticeable in the more efficient flying and control qualities of the plane, as the corrective use of controls to overcome the offset propeller thrust augmented by the stopped propeller drag is practically nil, and right or left turns easily made. This is a "premium" factor in view of the United States Department of Commerce requirements whereby a twin-motored plane must be licensed according to "ceiling" and "pay load" capacity when operated with but one of its motors and under satisfactory control characteristics, as practical flight on one motor with safety is the main purpose demanding the use of multi-engined designs.

(4) The broad airfoil form of lifting fuselage of the Burnelli design is surrounded by all of the major load-carrying structure; the engine mounts are forward with a strong metal bulkhead between; the wing beams are across the ceiling; the landing-gear structure at the sides unlike the long tubular fuselage construction of the conventional transport type, which forms mainly a streamline housing for the cabin section, with the main load-carrying elements not contributing to the strength thereof. Further, the compact airfoil body section of the Burnelli design possesses far greater resistance to buckling on impact than a long tubular body with engines rearward, in which the bending loads are maximum at the passenger section and which is weakened to a certain extent by the windows and doors. Further, the landing gear and tail wheel of the Burnelli design contribute no direct shock to the lighter outboard wings or tail group, the landing strains and taring shock loads being directly applied to the deep-sectioned body, thus imposing no landing strain through the more delicate wings and tail elements as in contrast to conventional designs.

(5) The fact that the body actually lifts 25 percent of the gross weight, as per the approval of the National Advisory Committee of Aeronautics for air transport carrier license purpose, makes it clear that the wings are proportionately reduced in required area and relieved of load with substantial relief of bending stresses throughout, as the lift forces peak, in the center of the airplane, instead of being reduced in this critical load section by the addition of a nonlifting body element. With the body supporting 25 percent, or 3,400 pounds, which is equal to the body structure plus the engine weight, it is understandable that the plane should ride through rough air or maneuver with less shock

and landing strain throughout, and also that the compactness of weight provides better stability and control qualities in its operation.

(6) Ease of inspection and maintenance is an important factor of safety, and the human element will always be a problem in this respect. The Burnelli ship is in a class by itself in this feature, because not only are all engine details, fuel and instruments, leads and controls more compact and easily accessible in the nose of the wide body, but the distinct feature of these elements being visible to the pilot and accessible in flight also must be appreciated as a most desirable maintenance and safety feature. The retractable landing gear is not only visible to the pilot in flight but accessible for inspection of adjustments, another exclusive advantage.

(7) An interesting inherent safety quality of the design for over-water operation is the fact that the wide body, made watertight, will serve as a boat bottom for distress landing and float indefinitely, as the body will provide adequate buoyance, with required stability, serving as a life raft. The wings can be easily arranged for quick release to entirely achieve this purpose. It is generally recognized that the landplane is of higher performance and economy than the more cumbersome flying boat, which depends on side floats for marine stability.

The arrangements for the pilot and visibility provided is entirely satisfactory and in certain respects superior to present transport practice. Also, and a very important feature, is the unobstructed passenger vision, due to the high wing arrangement.

With modesty I state that my judgment is established on over 14,000 hours of flying, covering all the types of aircraft and operations of same, including the latest types.

I have piloted the UB-14 through its test and demonstrations, covering about 100 hours' flying, and know it to represent a distinct advance in aircraft design, in consequence of which I have selected the Burnelli UB-14 transport for my projected nonstop refueling flight around the world.

Yet this Texas inventor is just one of the many such inventors Nation-wide whose great contributions and inventive genius have been smothered in every way possible by these monopolistic groups. We found that what applied to the cross licensing and patent pooling in the monopolistic aircraft field, also applied with equal force to the fields of radio, telephone, telegraph, television, oil-cracking processes, shoe manufacturing, medical instruments, and so forth.

LAW VIOLATED IN AIRCRAFT PROCUREMENT

I have repeatedly called to the attention of the Congress on several different occasions and I have placed in the RECORD copies of the contracts and references to aircraft procurement law violations, and have also put in the RECORD the Comptroller General's reports on the way these contracts have been construed, which shows that both the Army and the Navy have set up their own systems of procurement contrary to the Aircraft Act of 1926. The Comptroller's reports show that more than 90 percent of the equipment, up to the time my report was filed in 1934, had been bought in open violation of the Aircraft Act, and I want at this time to call your attention to the fact that we ought to compel its observance by all of the departments in their procurement of aircraft or amend that act.

[Here the gavel fell.]

Mr. McFARLANE. Mr. Chairman, I ask unanimous consent to proceed for 5 additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Texas?

There was no objection.

NO TAIL-GUN PROTECTION

Mr. McFARLANE. I also wish further to call your attention to the colloquy on page 538 of the hearings between the chairman of the subcommittee and General Westover, in which the chairman makes an observation in regard to these heavy bombers, in which the gentleman from Florida is interested:

Mr. SNYDER. Of course, they are fast and well supplied with armament and certainly, I should say, a monument to the skill of aeronautical and other scientists; but, at the same time, owing to their great size, despite their speed, they cannot be maneuvered as readily as the smaller types of fighting ships, and therefore would they not be vulnerable to attack by a squadron of five or six of the most modern pursuit planes?

General Westover. The objective of pursuit is always to be so much faster and so much more mobile and to have sufficient fire power to be able to attack the best bombers in existence. However, the defense of a bomber consists largely in the stability of its gun platforms and the number of guns placed so as to cover every angle of approach. A pursuit plane, unless it has the opportunity for a straightaway dive and effective short-range gunfire, cannot achieve its objective.