

29-8-62

T1-333 F

Modelo: STERNMAN

Propietario S.A.F

Seguro: Vence: 16-8-62

Certificado de renovación: vence: 14-9-62.

Destruído en Palmar Sur

C. de la : ~~(C)~~ (P)

3411 Tulare Ave., Burbank, California

Plant & Service Facilities, San Fernando Valley Airport, Van Nuys, California

A SECTION

Revamped Stearman

Is Safer, More Efficient Duster-Sprayer

The Stearman PT-17 long has been the standby of agricultural flying. But operators have never left any doubt about the fact that it could be improved a good deal.

National Aircraft now has done this improving job. Its NA75 Stearman has it all over the older model in safety and earning ability, thanks to new features that range all the way from better flight characteristics to lower maintenance costs.

FOR years, agricultural aviation has been looking for a truly safe and efficient airplane.

The only design available in sufficient numbers has been the old Stearman PT-17, built as a primary trainer during World War II. Of the 4225 planes currently certificated for aerial application under CAR Part 08, 1869 are Stearmans.

Its biplane configuration and rugged construction at first seemed to make the Stearman ideal for dusting and spraying. However, the fast breaking stall—pur-

posely designed into the wings for student instruction—was a deadly characteristic for the duster conversion. In addition, the wood construction of the wings (necessary because of the metal shortage during the war) did not give the long service life demanded by the operators. Nor was it the best thing for quick field repairs.

To meet the demand for a safe aircraft specifically designed for aerial application, National Aircraft Corp., Van Nuys, Calif., set out to modify the Stearman, reasoning that, after all, the Stearman was available and did have many favorable characteristics.

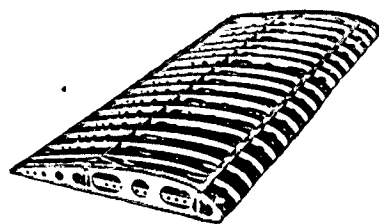
After two years of work in the field with the operators, NAC came up with its Model NA75 high-lift wings of all-metal structure and with Göttingen 398 series airfoil. This airfoil and increased wing span and chord gave better lift-drag ratio and slow, stable stall characteristics. Empty stall speed of the Stearman dropped from 59 mph to 35.

The fabric-covered all-metal structure of the wings permits fast, easy repair in the field—a prime requisite for any agricultural operation. Fabric clips instead of rib

stitching secure the fabric to the three-piece bolted ribs.

All ribs are blanked, pierced, and formed with punch press dies and attached to the spar with screws instead of rivets. No drilling is necessary, and field repairs can be made with a minimum of tools.

All four wings are of constant section from root to tip and use the



FABRIC-COVERED all-metal wings have constant section from root to tip. Produced by punch press, ribs are completely interchangeable.

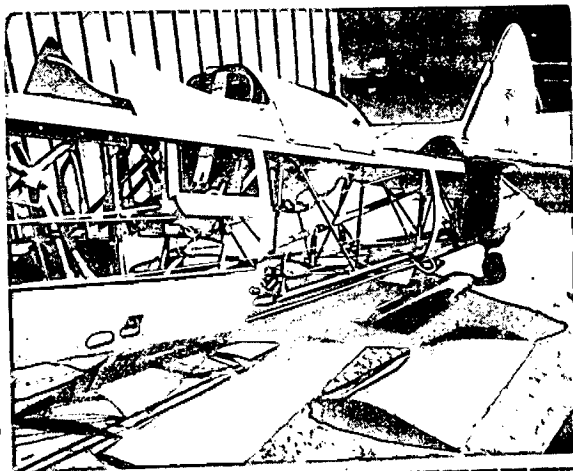
same airfoil. Ribs are, therefore, completely interchangeable, which means the operator doesn't have to stock a large number of different replacement parts. Leading edge skins are easily removable.

Agricultural aircraft frequently operate only 3-6 ft above the ground, so snappy aileron control is vital. In flying a 40-ft swath, for example, it is not uncommon for a pilot to hit the prop wash from a previous pass. In addition, airspeed is usually critically low during pull-up and turnarounds, so lateral control at slow speeds is a must.

Ailerons on upper wing improve lateral control

The increased span of the upper wing had the effect of moving the lower wing ailerons inboard to a less efficient position. To improve lateral control, NAC added ailerons to the upper wings. Coupled with the lower speeds the NA75 can sustain, the double aileron installation becomes a most attractive feature.

The addition of wing splates (tip discs) to the upper and lower wings further improves low speed aileron control and adds to total lift. The splates are essentially



NA75 FUSELAGE can be stripped from firewall to tail in five minutes, thanks to quick-detach side panels. These are attached to primary structure with Dzus fasteners—all you need is a screwdriver.



Aviation Age

as reprinted from

DUST TO
SPRAY

National NA-75

WITH INSTANT CHANGE FROM



VISIBILITY out of NA75 Stearman is good. Instruments are mounted in center wing section in pilot's line of sight in flight.

dams that prevent air from the high pressure area under the wing from curling over the wing tips to the low pressure area above the wing and thus spoil lift.

The splates increase the effective span of the wing. By controlling wing tip vortices, they also give a better swath.

NAC first brought out its new Stearman wings two years ago. Sales averaged about 140 units annually. Working Stearmans can be fitted with the wings in about 150 manhours from an assembled kit. Price of the kit is \$1975, hardware exchange.

The NA75 wings were a success. Nine out of ten of the original purchasers have ordered additional wings for the remainder of their fleets.

NA75 Stearman conversion flies bigger load more safely

With such encouragement, the NAC engineers started to work on a conversion of the entire Stearman. The result is the NA75 "composite" Stearman—a radically improved Stearman fuselage with NA75 wings.

NAC made every effort to reduce drag, so that the operator could use his horsepower for more load and a higher safety factor. The conventional dust spreader is very bulky and produces high drag, as does the conventional spray boom under the wing. NAC cleaned these items up nicely by cutting down on the frontal area of the dust spreader and moving the spray boom from under the wing to the trailing edge.

All dispersal equipment (spray pump, dust agitator, etc.) is mounted inside the aircraft structure. It is engine-driven rather than wind-driven—another saving in drag.

The combination 30-cu ft dust-spray

hopper eliminates all mechanical work in changing from dust to spray and back.

Hopper is forward of cockpit to protect pilot

Removable metal fuselage side panels let a mechanic strip the aircraft from firewall to tail in five minutes for the removal of corrosive chemicals from the primary structure.

One of the main advantages of the NA75 Stearman over newer, production duster-sprayer is the fact that the load is carried ahead of the pilot rather than aft of him. In the event of an accident, the pilot is protected by engine, fuselage structure, and the load before the impact gets back to him. In some production models now on the market, the engine comes back into the pilot's lap and the load moves forward on him. He becomes the roast beef in the sandwich.

All instruments are located in the center wing section to keep them in the pilot's line of vision in flight.

This, in effect, improves operational visibility.

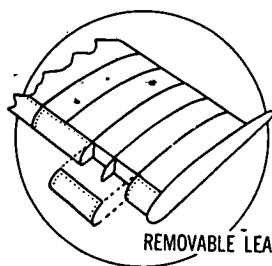
Chrome-moly wire cutters are installed on landing gear legs, wing struts, and vertical fin, so the aircraft will cut through power or telephone lines instead of tripping on them in low-level operations.

Operator has choice of seven engines for his ship

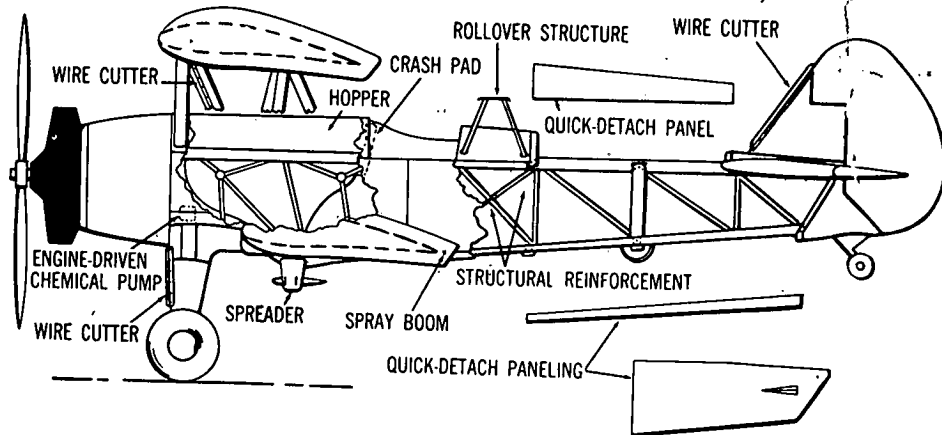
The NA75 Stearman is available with one of seven powerplants: Continental 220 hp, Lycoming 225 hp or 300 hp, Jacobs 225, 275, or 300 hp, or Pratt & Whitney Aircraft 450 hp. Operator preference runs about 50-50 between the 220-hp and the 450-hp engines.

Empty weight of the NA75 Stearman with the 220-hp engine will average 2100 lb. It will gross at 3912 lb carrying a load of 1300 lb.

Operators using the P&WA 450-hp engine have reported loads in excess of 2000 lb. Empty weight of the 450-hp NA75 Stearman runs around 2400 lb and gross weight around 4225 lb.



REMOVABLE LEADING EDGE SECTIONS



NATIONAL AIRCRAFT'S Stearman emphasizes easy maintenance and low-drag dispersal equipment. Load is carried forward of cockpit to give pilot protection in a crackup.

NATIONAL AIRCRAFT CORP.

3411 TULARE AVENUE, BURBANK, CALIFORNIA

COMMENTS FROM OUR CUSTOMERS

"The NA-75 with the R-985 engine is a wonderful load-carrying airplane, and as a sprayer is, in its class, "tops". We have not in two years of operation (approximately 800 hours) had trouble with any component, pumps, power takeoff, gear box, lines, etc." (James B. Godrich, Pilot, Mosquito Control Division, State of Kentucky, Department of Agriculture.)

"In my opinion, our airframe repair and maintenance is reduced 50% by using National wings. Lower takeoff and landing speeds are a contributing factor but eliminating the high cost of repair of the old wooden Stearman wing is the chief reason for our lowered maintenance costs. Excluding the cost of winter repairs, we also find ourselves able to increase our summer income in several ways by using the National wings. First, we are able to work safely from short airstrips and secondly, we feel that our collision hazard is reduced on all airstrips by reason of shorter takeoff distance and reduced landing roll-out. In short, we believe that your National wings have made the old wooden Stearman wings virtually obsolete for our work." (Max W. Potter, Casa Grande Dust & Spray, Casa Grande, Arizona.)

"What we appreciate about the high lift wing setup is the reduction in operating costs. In fact, the first year has very nearly saved enough to cover the cost of the wings. Also we find maintenance on the engines has been reduced considerably". (Kenneth W. Huffman, Huffman's Air Service, Malin, Oregon.)

"The wide speed range of our Stearmans equipped with National wings is more than satisfactory for dust or spray application, and the increased cruising speed is cutting our ferry time appreciably. I was also pleasantly surprised to see how complete the assembly was on my wings which were purchased in kit form. Frankly, I did not expect anything but a kit of parts to be assembled here, so when I received a set of wings so completely assembled as a kit, it was quite amazing. Keep up the good work — I feel you have given both the Stearman and us operators a new lease on life." (Monty Landsidel, Monty's Agricultural Aviation, Dos Palos, California.)

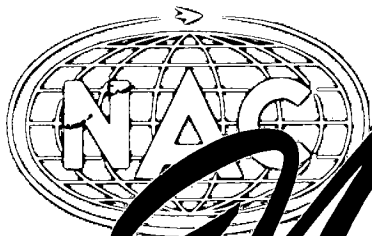
"As you know, the standard wing tends to rush on pull-ups. We have not found this to be the case with your wings. As we use 220 Cont. engines exclusively, we find the high lift wings a good investment." (Lou Precissi Flying Service, Inc., Lodi, California.)

"You can glide steeply over a high obstacle with very little gain of speed, then get a good solid flare-out regardless of the load you're carrying. You enter the field at a steeper angle, yet slow, and line up near the flagger. The nose doesn't have him covered. Of tremendous importance to us is the visibility, so greatly improved over conventional Stearman. We feel we are

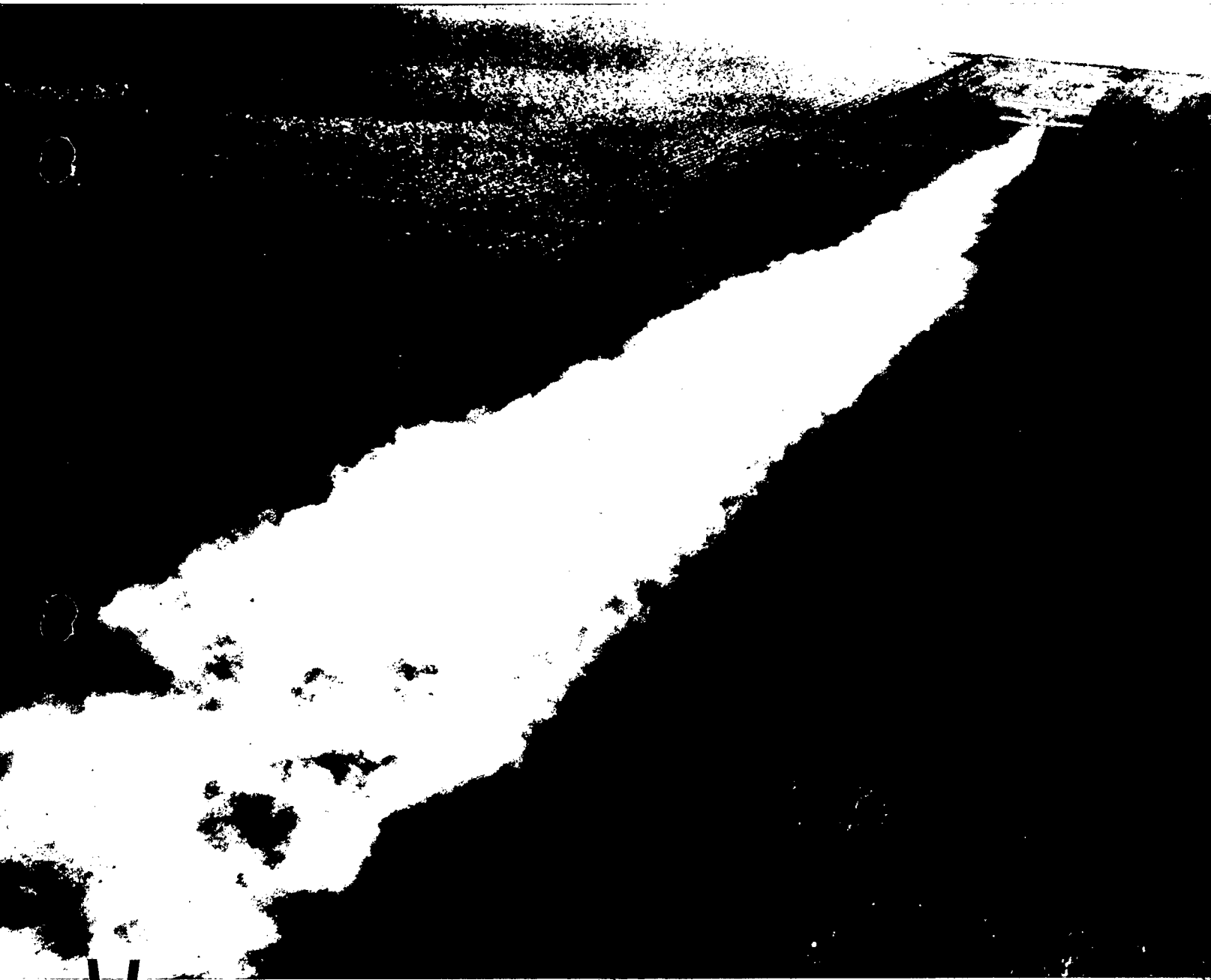
getting better penetration into heavy crops because of the greater downwash." (Murt Dula, Crop-Air Inc., Visalia, California.)

"The wings certainly take the Stearman out of the compromise class of agricultural airplanes and make it a sure-nuff using airplane. The increase performance of the wing makes it possible to work the airplane with maximum hopper loads with a small engine. The economics of this arrangement are attractive. We are quite pleased with the wings and are planning further installations." (Warren L. Flynn, Flynn's Flying Service, Inc., Harrison, Arkansas.)

"We have a set of your wings and center section complete with double ailerons installed on a Stearman sprayer. The engine is a 220 Cont. that we overhauled and installed high dome pistons, making it about a 245 hp. Cont. We use a McCauley prop with a 9.5 pitch. Our major operations in Florida are mostly about 25 feet above sea level. So far, the heaviest load I have carried is about 1350 lbs. of spray and used about 1350 feet of hard surfaced runway with no wind conditions. The airplane will consistently break ground at 45 to 48 mph. loaded. With a 1000 pound load and 1950 RPM I will get about 200 fpm rate of climb. The airplane loaded will fly good and handle good at speeds of 55 mph and up. With the double aileron, the airplane handles very easily and gives good control at slow speeds and loaded. The airplane feels very solid in the flair-outs for the spraying runs and responds very quickly on the pull-ups. I would guess that these high lift wings will increase the good safe operating limits of a standard Stearman by about 400 pounds." (Sig. Lysne, Indian River Flying Service, Inc., Vero Beach, Fla.)



National NA-75



WITH INSTANT CHANGE FROM...

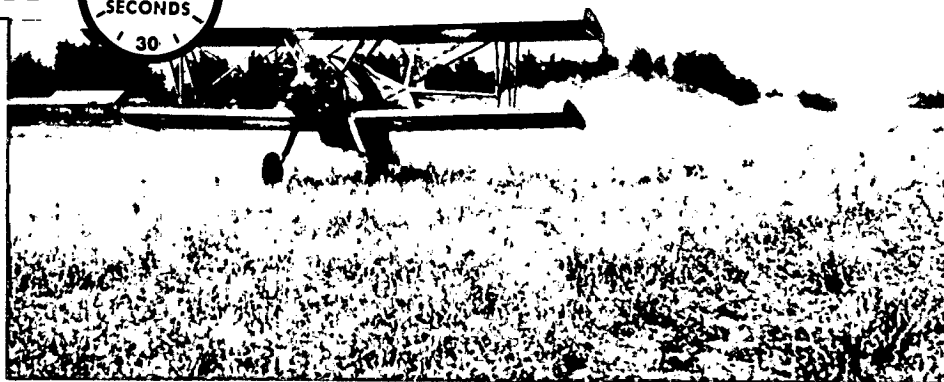
DUST to SPRAY

DUST...

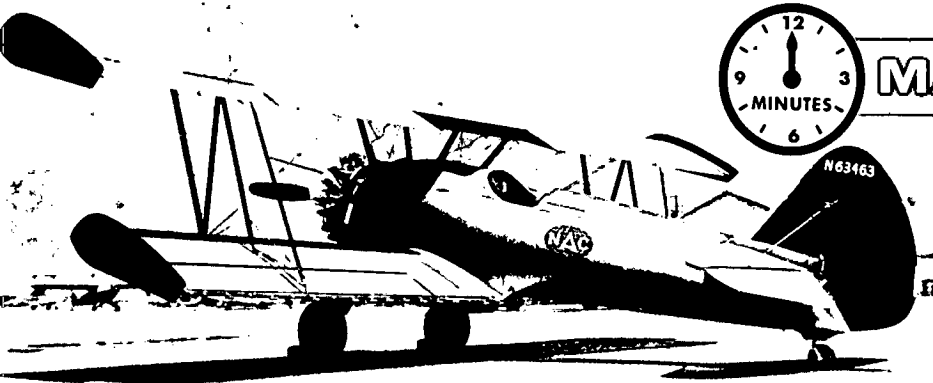
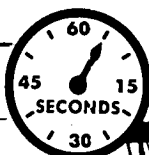


DUST or SPRAY IN 5 SECONDS!

A combination 31.7 cu. ft. dust-spray hopper permits INSTANT CHANGE from dust to spray or spray to dust. No plates to unbolt, no need to remove venturi or boom! A liquid-tight dust gate is used for an emergency dump valve which can completely dispose of a load in 5 seconds. To eliminate drag, the pump, agitator drive, shut-off valve and all plumbing to spray boom is located INSIDE the fuselage. The spray pump and dust agitator drive are engine-driven through variable speed power take-off which is controlled in flight. A low drag airfoil-type venturi permits maximum efficiency in laying down the dust swath. The spray boom is mounted on the trailing edge of the lower wing — the greatest area of neutral pressure. Simple, sturdy installation keeps it out of foliage and in plain sight of the pilot in flight.



SPRAY...

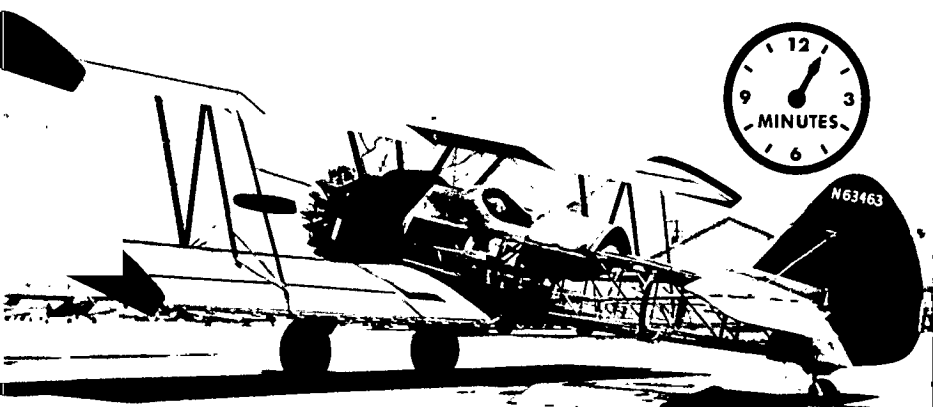


MAINTENANCE

The NA-75 Hi-Lift Wings are fabric-covered and of all-metal structure engineered to permit assembly or repair with a screwdriver and ordinary wrenches for fast, easy repair in the field — a prime requisite for any agricultural operator. The leading edge is not fabric covered and is assembled in small sections for ease of replacement of any damaged part without removing the fabric. Sewing or rib stitching of fabric has been eliminated by the use of fabric clips. All ribs are of three-piece construction which permits assembly or replacement of any rib on any section in a matter of minutes.

The ten metal fuselage panels are secured by Airloc fasteners and two men with screwdrivers can strip the aircraft from firewall to tail in five minutes for inspection, easy maintenance, or for the removal of corrosive chemicals from the primary structure.

As no special tools or jigs are required, both wings and fuselage panels are available in kit form for assembly in your own shop. Wings may also be ordered assembled but not covered, or assembled and covered.



SPECIFICATIONS FOR NATIONAL NA-75

HI-LIFT WINGS

Wing Section: Gottingen 398

Span: Upper Wing 33'; Lower Wing 29.5'

Chord: 65"

Wing Area: 338.26 sq. ft.

Incidence: Upper 4°; Lower 2°

Center Section: All metal skin stressed construction. Flight and engine instruments located in trailing edge.

FUSELAGE

Removable metal panels cover standard Stearman welded steel tubing. Cockpit padded with 6" crash pad. All instruments removed from cockpit and installed in trailing edge of center wing section for greater safety and visibility.

LANDING GEAR

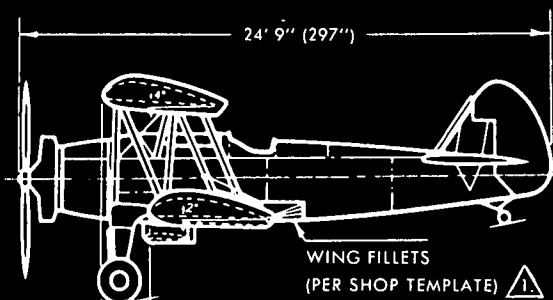
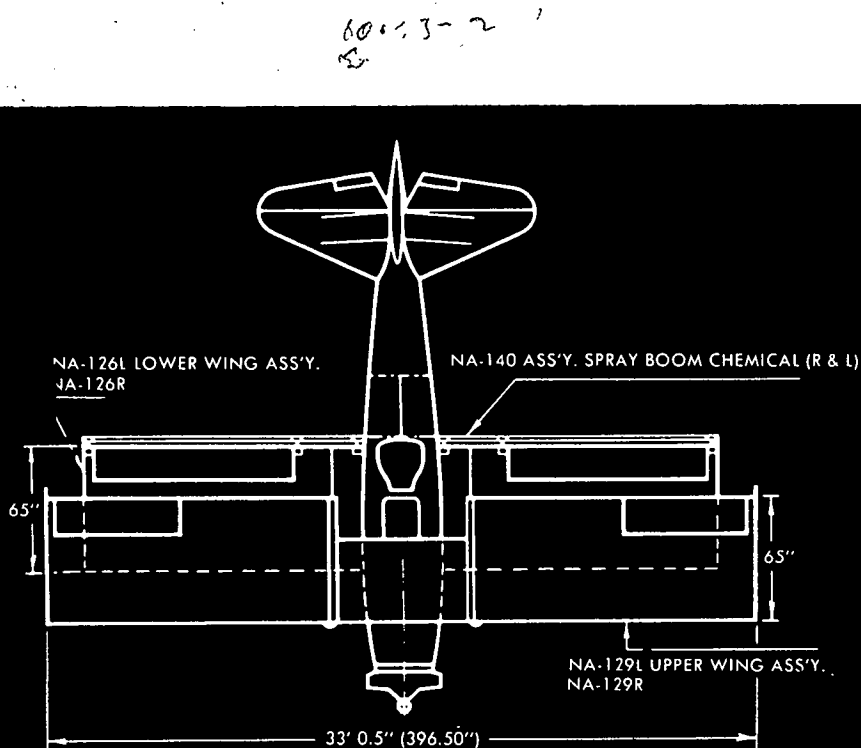
Standard cantilever air-oil oleo. Double action Servo brakes. Chrome-moly wire cutters installed on landing gear, wing struts and vertical fin.

HOPPER

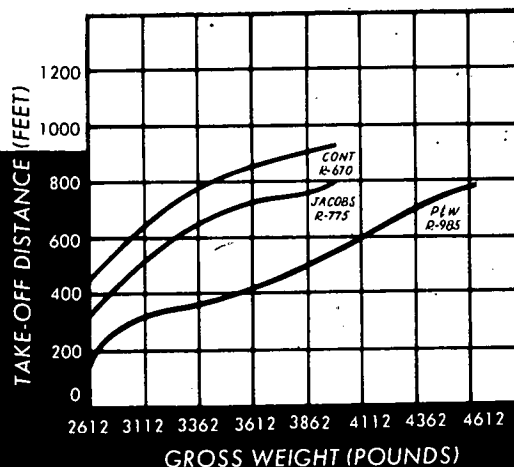
Reinforced fibre glass, 31.7 cu. ft. capacity. Conforms to contour of fuselage for improved visibility.

ENGINES

Optional Continental 220; Lycoming 225 or 300; Jacobs 245 to 300; P&W 450; Wright 425.



STAGGER C.S.-27.0
STRUT PT.-26.8 .13



TAKE-OFF
DISTANCE
SEA LEVEL -
NORMAL DAY -
29.92 Hg.
59.6 F.

CHEMICAL PUMP & NEGATIVE PRESSURE VALVE INSTALLED IN INTERIOR OF FUSELAGE FOR REDUCTION OF PARASITE DRAG.

PHANTOM LINES INDICATE METAL FUSELAGE SIDE PANELS, REMOVAL TIME, 5 MINUTES.

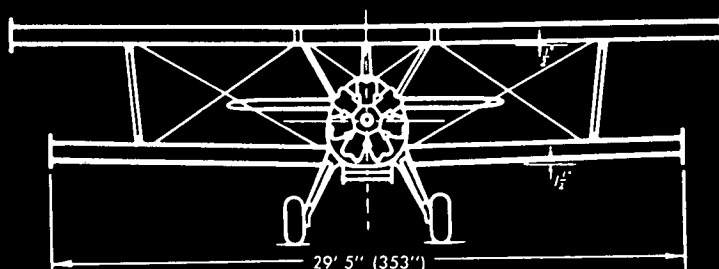
AG. EQUIPMENT CALLED OUT ON THIS D'W'G MAY BE INSTALLED ON ANY BOEING MODEL 75 AIRCRAFT.

WINGS CALLED OUT ON THIS D'W'G MAY REPLACE WINGS ON ANY BOEING MODEL 75 AIRCRAFT.

WINGS TO BE ASSEMBLED & RIGGED SAME AS ORIGINAL AIRPLANE, EXCEPT FOR INCIDENCE ANGLE OF LOWER WING.

WIRES, STRUTS & ATTACHMENTS ARE SAME AS ORIGINAL AIRCRAFT.

NOTE ⚠ WING FILLETS OPTIONAL EQUIPMENT — NOT REQUIRED FOR FLIGHT.



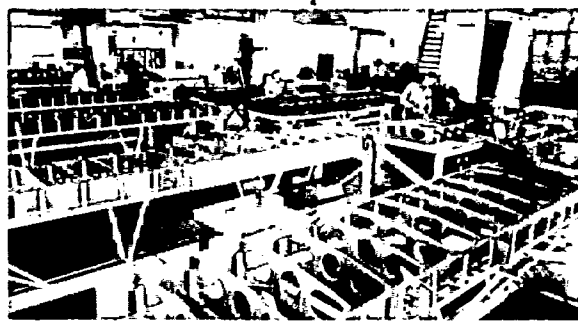
National Warranty...

The National NA-75 represents the combined efforts of the men who use and fly the plane and the engineers of National Aircraft Corporation who spent several years in research, development and field service to come up with a plane specifically designed for the agriculture aviation industry. The result is a duster-sprayer with unduplicated advantages in greater payload, safer flight, better flight characteristics, rapid field repair and lower maintenance costs.

The National NA-75 is unconditionally backed by National Aircraft Corporation, a well-established and soundly-financed organization with an international reputation. Such a plane as the NA-75 is possible because of the combined research and development facilities of the successful five divisions which comprise NAC. All of the research facilities, manufacturing skills and manpower of the parent organization are available for continued production and future refinements.

Users of the NA-75 can be assured of a continued source of supply for their "composite" Stearman as the Hi-Lift Wings, fuselage panel sections and agricultural equipment are manufactured by NAC.

The NA-75 is the finest applicator plane available today. Its many features place it far ahead of its competitors. Compare its performance. Analyze its low operating costs and time-saving features. Best of all — ask the man who owns and flies it!



PRINTED IN U.S.A.

The Manufacturing Division is located at San Fernando Valley Airport, Van Nuys. Please address all inquiries to:

MANUFACTURING DIVISION OF NATIONAL AIRCRAFT CORPORATION

3411 TULARE AVENUE, BURBANK, CALIF.

MANUFACTURING IS ONE OF 5 DIVISIONS OF NATIONAL AIRCRAFT CORPORATION
OTHER DIVISIONS ARE



MAG-ELECTRIC
magnetic amplifiers,
transformers, power supplies,
toroids, and associated items
... wholly owned subsidiary.



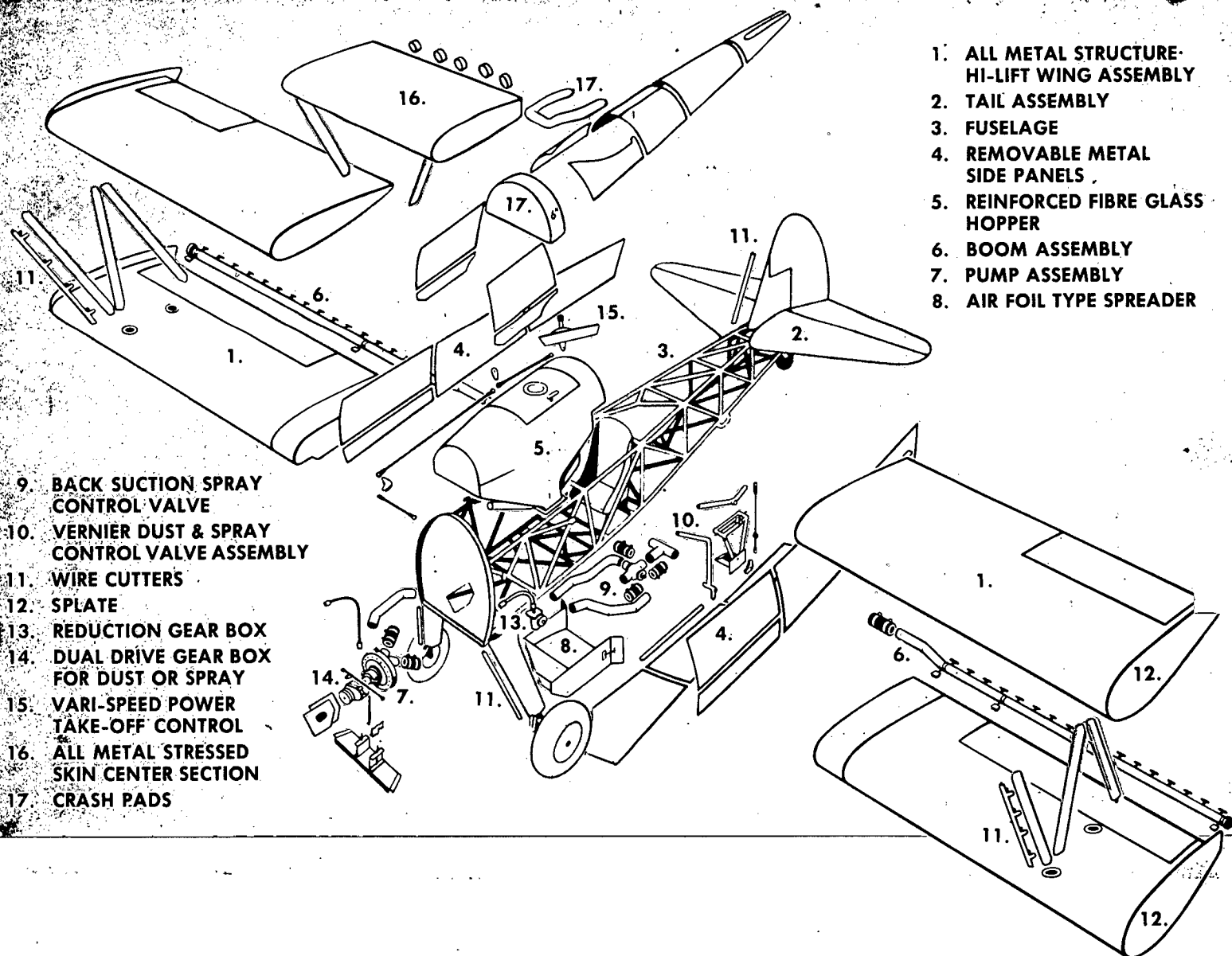
**MARVELCO
ELECTRONICS DIVISION**
research and production of
electronic components, missile
guidance systems, computers,
automation, germanium trans-
istors, etc.



**AIRCRAFT
DIVISION**
airframe modification, overhaul
and repair of all types of air-
craft.



**AIRCRAFT
ACCESSORIES DIVISION**
hydraulic, pneumatic, oil, fuel,
mechanical, and electro-mechan-
ical accessories.



PERFORMANCE CHART

LOAD	GROSS	TAKE-OFF DISTANCE (FT.)			CLIMB (F.P.M.)			STALL	180° TURN/SEC.		
		275 HP	220 HP	450 HP	275 HP	220 HP	450 HP		275 HP	220 HP	450 HP
	2612	350	450	186	925	700	1220	35	16	18	16
500	3112	520	645	330	900	660	1110	41	16	20	16
750	3362	650	785	375	860	580	1040	45	17	22	17
1000	3612	730	845	420	740	500	900	50	17	24	18
1250	3862	740	890	500	500	420	820	55	20	25	18
1500	4112			600			740				19
1750	4362			655			600				20
2000	4612			785			550				21

REMARKS: All information corrected for sea level — 29.92 Hg & 59.6°F.



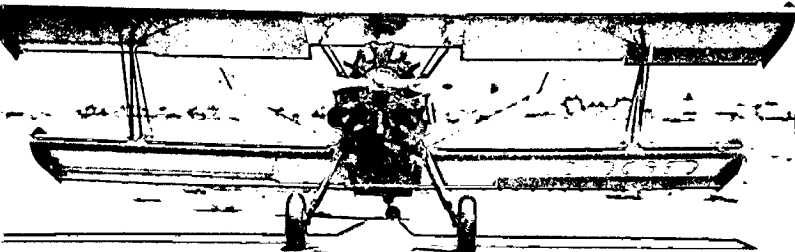


Recognizing the fact that most of the aircraft used today by Ag-Av operators and pilots are "compromise" craft with many shortcomings, engineers of National Aircraft Corporation have been working for the past few years in the field with dusting operators and pilots to develop the type of plane they wanted — one with greater safety, increased earning capacity and ease of maintenance and repair.

The result is the National NA-75, a duster-sprayer plane with a radically improved Stearman fuselage, all-metal structure NA-75 Hi-Lift wings, and dispersal equipment

designed to reduce drag and provide the **ONLY INSTANT-CHANGE DUST-SPRAY** rig available. The NA-75 incorporates desired agricultural flight characteristics and carries the highest CAA-rated payload ever granted to a Stearman!

For more than two years NA-75 Hi-Lift wings have been used by operators throughout the United States, flying thousands of hours without a failure. Empty stall speed has been lowered to 35 mph! The success of the wings is evidenced by the fact that nine out of ten of the original purchasers have ordered additional NA-75 wings for the remainder of their fleets.





DIRECCION GENERAL DE AERONAUTICA
SAN JOSE, COSTA RICA

26 Setbre 1962

T1- 332 F

motor Turbo 1200

2 985 AN-3 Serie = 13792

Helice Instalada

58245

Avion Serie = 75-8786.

Boeing- Stearman.



DIRECCIÓN GENERAL DE AERONAUTICA
SAN JOSE, COSTA RICA

5 de setiembre de 1962.-

MAN-036

Señor
Rodolfo Vargas L.
Director General de Aviación
PRESENTE

Estimado señor:

La presente para informarle lo concerniente al accidente sufrido por la aeronave TI-332-F, operada por Servicio Aéreo de Fumigación y pilotada por el Capitán Alcides Villalobos ocurrido el miércoles 29 de agosto del año en curso a las 8:45 de la mañana en el campo de aterrizaje de Palmar Sur - mientras despegaba cargado con 200 galones de líquido para fumigar. Es de anotar que no hubo desgracias personales.

Nombre del propietario	Servicio Aéreo de Fumigación
Fecha de matrícula	14 de setiembre de 1961
Operada por	Servicio Aéreo de Fumigación
Servicio a que se destina	Fumigación

Descripción de la aeronave:

Fabricante	Boeing Aircraft Corp.
Modelo	Stearman A-75
Año de construcción	-----
Tipo	Biplano, convencional
Serie	75-8786
Capacidad combustible	45 gis.
Capacidad lubricante	6 gis.
Tripulantes	1
Capacidad pasajeros	-
Peso Bruto	4.225 libras
Peso Vacío	2.400 libras
Peso utilizable	2.225 libras (200 gis de peso variable - de 6 libras a 9 libras)

Descripción del motor:

Fabricante	Pratt & Whitney
Modelo	R-985AN3



Serie	13792
Tipo	Radial

Descripción de la hélice:

Fabricante	Hamilton Standard
Modelo del núcleo	2D30-243
Serie	58245
Modelo de aspas	61101A12

HISTORIA DEL VUELO:

Después de haber efectuado seis vuelos cargado con líquido para fumar, se inició el sétimo y una vez tomado una altura de unos veinte pies ya frente a las instalaciones de mantenimiento de la compañía SAF, el motor falló con pérdida de potencia, escopeteo y botó humo. En esta forma descendió en la pista y corriendo sobre ruedas llegó hasta unos 10 metros de la zona de seguridad, halando el avión para hacerlo saltar un paredón que se encuentra en la cabecera de pista 210°. Ya la velocidad del avión no fue suficiente para brincarcelo tropezando el tren de aterrizaje y terminando ahí su salto.

EXAMEN DE LAS PARTES EN EL LUGAR DEL ACCIDENTE:

Motor:

Daños externos, ninguno

Daños internos, rotura de pistones, anillo y bielas de los cilindros Nos. 4 y 5 (Master Road)

Hélice:

Doblada una de sus palas

Avión:

- 1) Pared de fuego deformada
- 2) Herrajes y tubos de montaje del tren de aterrizaje rotos y doblados
- 3) Estructura del avión desde el asiento de piloto hacia la pared de fuego deformada por el impacto
- 4) Ala izquierda inferior destrozada
- 5) "Strut" de punta ala lado izquierdo formador de "N" roto
- 6) Instalación para fumar incluyendo bomba y tanque rotos



DIRECCION GENERAL DE AERONAUTICA

SAN JOSE, COSTA RICA

- 3 -

7) Alerón superior del ala izquierda roto en los soportes para fijación

CAUSA PROBABLE DEL ACCIDENTE:

Por falla del material hubo rotura de la biela maestra en el cilindro No. 5 y por descompensación del motor rotura de biela del cilindro No. 4, perdiendo la potencia el motor y trabándose en tal forma que no es posible hacer lo girar ni a mano.

Horas motor a fecha 28 agosto : 769:10

Horas avión a fecha 28 agosto : 629:22

De usted atentamente,


Odilón Díaz Ch.
Inspector de Mantenimiento

ODCH:opa.-



DIRECCION GENERAL DE AERONAUTICA
SAN JOSE, COSTA RICA

5 de setiembre de 1962.-

MAN-036

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Fecha de matrícula	14 de setiembre de 1961
Operada por	Servicio Aéreo de Fumigación
Servicio a que se destina	Fumigación

Descripción de la aeronave:

Fabricante	Boeing Aircraft Corp.
Modelo	Stearman A-75
Año de construcción	-----
Tipo	Biplano, convencional
Serie	75-8786
Capacidad combustible	46 gls.
Capacidad lubricante	6 gls.
Tripulantes	1
Capacidad pasajeros	-
Peso Bruto	4.225 libras
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Peso utilizable	2.225 libras (200 gls de peso variable - de 6 libras a 9 libras)

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Descripción de la hélice:

Fabricante	Hamilton Standard
Modelo del núcleo	2D80-243
Serie	58245
Modelo de aspas	61101A12

HISTORIA DEL VUELO:

Después de haber efectuado seis vuelos cargado con líquido para fumigar, se inició el séptimo y una vez tomado una altura de unos veinte pies ya frente a las instalaciones de mantenimiento de la compañía SAF, el motor falló con pérdida de potencia, escopeteo y botó humo. En esta forma descendió en la pista y corriendo sobre ruedas llegó hasta unos 10 metros de la zona de seguridad, halando el avión para hacerlo saltar un paredón que se encuentra en la cabecera de pista 2100. Ya la velocidad del avión no fue suficiente para brincarcelo tropezando el tren de aterrizaje y terminando ahí su salto.

EXAMEN DE LAS PARTES EN EL LUGAR DEL ACCIDENTE:

Motor:

Daños externos, ninguno

Daños internos, rotura de pistones, anillo y bielas de los cilindros Nos. 4 y 5 (Master Road)

Hélice:

Doblada una de sus palas

Avión:

- 1) Pared de fuego deformada
- 2) Herrajes y tubos de montaje del tren de aterrizaje rotos y doblados
- 3) Estructura del avión desde el asiento de piloto hacia la pared de fuego deformada por el impacto
- 4) Ala izquierda inferior destrozada
- 5) "Strut" de punta ala lado izquierdo formador de "N" roto
- 6) Instalación para fumigar incluyendo bomba y tanque rotos



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7) Alerón superior del ala izquierda roto en los soportes para fijación

CAUSA PROBABLE DEL ACCIDENTE:

Por falla del material hubo rotura de la biela maestra en el cilindro No. 5 y por descompensación del motor rotura de biela del cilindro No. 4, perdiendo la potencia el motor y trabándose en tal forma que no es posible hacer lo girar ni a mano.

Horas motor a fecha 28 agosto : 769:10

Horas avión a fecha 28 agosto : 629:22

De usted atentamente,

Odilón Díaz Ch.

Inspector de Mantenimiento

ODCH:opa.-

Agosto 29 de 1962. -

Señor
Director General de Aeronáutica
Rodolfo Echandi
Presente

Estimado señor:

Me dirijo a usted para ponerle en conocimiento del accidente que sufrí hoy, a las 8:45 de la mañana, mientras me encontraba en labores de mi función, al mando del avión TI-332F.

Después de un tiempo volado de dos horas y cuarenta y cinco minutos, con seis despegues y seis aterrizajes, sin haber notado en ningún momento nada anormal en el funcionamiento del motor, sufrió un paro mecánico el mismo, debido a algún desperfecto en su mecanismo.

Sin otro particular por el momento, aprovecho la oportunidad para suscribirme de usted,

muy atentamente,

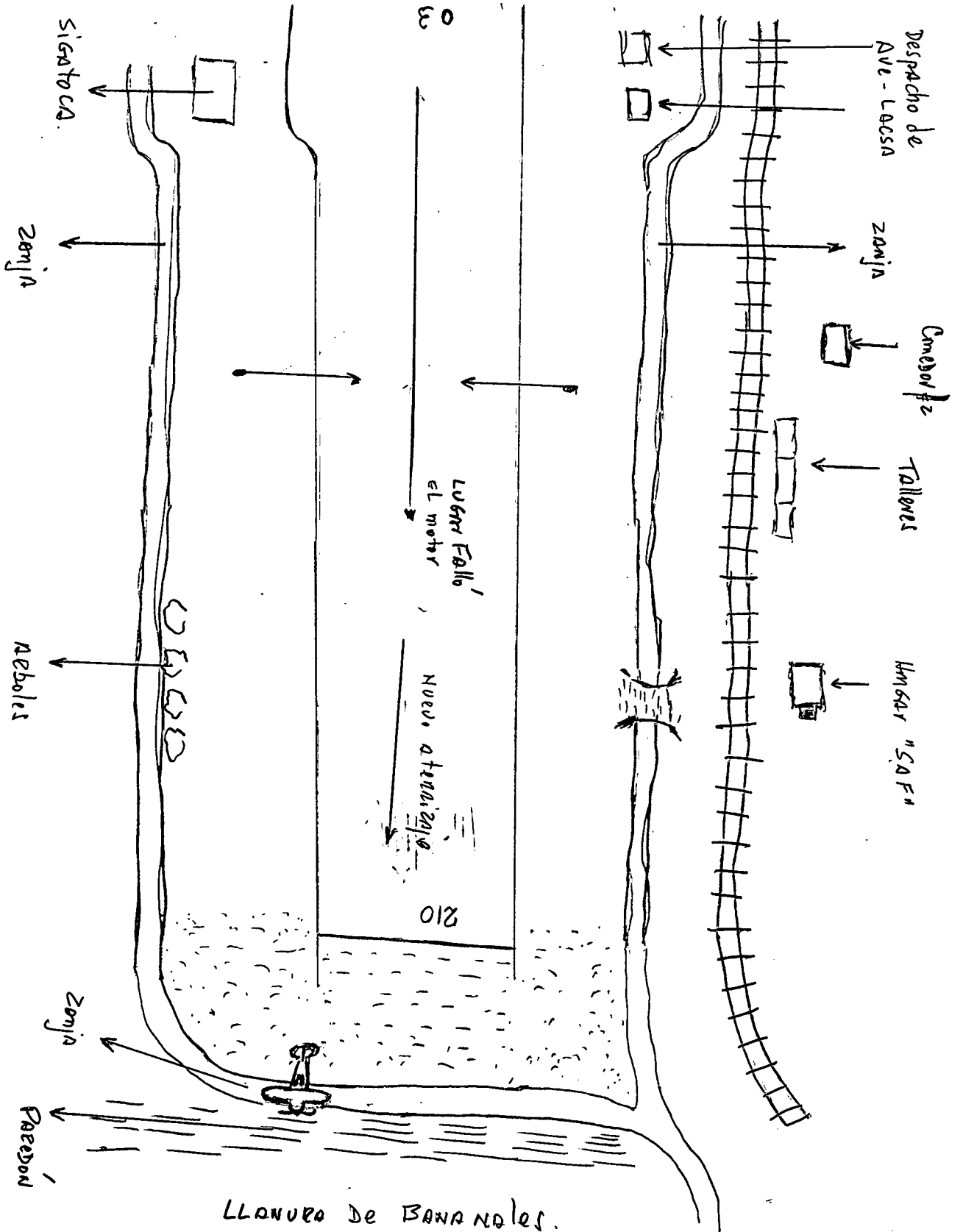
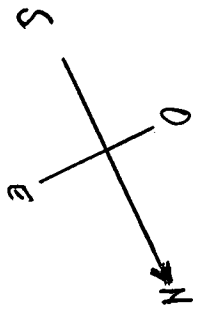
(firma) Alcides Villalobos Monge



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= Cerros =





5 Setbe 1962

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T- 332 F

Revisión Engine log :

marzo 13 1961 -

Servicio 100 Hs.

Se instaló nuevo motor
se hizo revisión completa al
avión -

Tiempo total = avión 4829. =

Firma RE King IA-124347.

Según formula 2350. -

marzo 13/1961

00:00 Hs. -

abril 4/61.

60:00

julio 31 /61.

92

Servicio 100 Hrs -

se cambio Cola -

Instalados bujías nuevas
motor aeronavegable. -

Firma RE King PyP 124347.



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27 Agosto 1962

Ti- 332 F

- ① Ejecutar servicio de 100 Horas avión y motor
- ② montantes "bord" delanteros del mo de bancada en mal estado.
- ③ montantes "bord" de bancada en mal estado
- ④ Eje de actuación para "Air Scoop" tiene mucho juego
- ⑤ Asegurar correctamente el conodo para cámara de aire caliente ("Air Scoop")
- ⑥ Protector del cilindro para frenos lado izquierdo fuera de su lugar
- ⑦ Tela del plano inferior lado izquierdo cerca del "camino del gato" necesita repararse tiene la pintura y el dope "cuarteado"
- ⑧ Tornillos para cabina de piloto lado izquierdo tiene el tubo roto.
- ⑨ Hacer limpieza del fuselaje parte interior, cables poleas y proteger.
- ⑩ Pegar tela en "tip" de ala inferior izquierda
- ⑪ Capón de llenado del cilindro maestro flojo.
- ⑫ Los balineros de la varilla de mando de los alerones inferiores derecho e izquierdo tienen juego



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#2
27 Agosto 1962

- ⑬ Vidrio izquierdo del parabrisas roto.
- ⑭ Tornillos del parabrisas lado derecho roto.

Revisión para Revalidación. Certificado Aeroma regabilidad

Oscar F. Soto

Certificado vence 14/9/62