Adopted: September 13, 1944 File No. 4100-43 Docket No. SA-83 Released: September 15, 1944

REPORT OF THE CIVIL AERONAUTICS BOARD

on the

Investigation of a Near Collision in Mid-Air Between Two Civilian Aircraft Engaged in Commercial Flights

An accident resulting from a near mid-air collision during take-off between two aircraft of United States registry, NC 29256 and NC 15847, occurred on the Macomb Airport, Macomb, Illinois, at approximately 6:40 p.m. on August 16, 1943. The pilot of NC 29256 received serious injuries when his airplane rolled beyond the boundaries of the field and overturned. His passenger was not injured. The aircraft received major damage. The pilot and passenger of NC 15847 continued their flight and were not injured.

CONDUCT OF INVESTIGATION

The Washington Office of the Civil Aeronautics Board, hereinafter referred to as the Board, was notified of the accident and immediately initiated an investigation in accordance with the provisions of Section 702 (a) (2) of the Civil Aeronautics Act of 1933, as exended. Air Sefety Investigator Leon H. Tanguay, from the Chicago Office, Safety Bureau of the Board, was dispatched to the scene of the accident and arrived there at approximately 8:00 a.m. on August 17, 1943. In connection with the investigation a public hearing was held in Chicago, Illinois on September 22, 1943. Allen P. Boardon, Chief, Investigation Division, Safety Bureau, was designated and served as presiding officer and the following personnel of the Safety Bureau participated in the hearing: Herbert V. Shebat, Senior Air Safety Investigator, Leon H. Tanguay, Air Safety Investigator, and Victor M. Clark, Senior Reports Editor. The transcript and exhibits of the hearing have been docketed as SA-83 and are filed in the Docket Section of the Board.

Upon the basis of all the evidence resulting from the investigation and hearing, the Board new makes its report in accordance with the previsions of the Civil Acronautics Act of 1938, as amended.

SUPMARY IND ANILYSIS OF EVIDENCE

Flight Personnel

Franklin David Sturdy, age 37, hold a private pilot certificate with a single-engine land, 0-450 h.p. rating. He had accumulated approximately 275 hours of flight time, a considerable portion of which was cross-country flying. He had recently accomplished the written examination for a commercial pilot certificate. Clin M. Fiercy, Sturdy's passenger, was not a certificated pilot.

Pierce Nicholas O'Carroll, age 42, held a commercial pilot certificate with single and multi-engine land, 80 to 1015 h.p., and instrument ratings. He is the owner and operator of the Honarch Air Service, Municipal Airport, Chicago, and had accumulated over 5,000 hours of flight time.

Thomas L. Shafer, O'Carroll's passenger, was not a certificated pilot.

The Aircraft

NC 29256, a Culver LCA, owned by Franklin D. Sturdy, received major damage. NC 15847, a Beechcraft C17B, owned by the Monarch Air Service, received no damage.

Neather

The weather was clear, wind north-northwest approximately 5 m.p.h. and had no bearing on the accident.

History of the Flights

Pilot Sturdy had flown the Culver to Macomb from Chicago earlier in the afternoon with Photographer Piercy as his passenger. O'Carroll also had flown to Maccmb from Chicago in the Beechcraft with Photographer Shafer. Neither of the pilots had been to the Macomb Airport before. Each pilot accompanied his passenger on his mission in Macomb of procuring photographs of a person or persons considered by the newspapers as having news value. After their assignment was completed, Pilot Sturdy and Photographer Piercy were the first to return to the airport. Piercy boarded the Culver Cadet while Pilot Sturdy proceeded to the operations office to obtain clearance and instructions for take-off. He was advised by the clearance officer and the airport manager to taxi to the southeast corner of the field and take off on the cast-west runway toward the west. At about this time Pilot ['J rrall O'Carroll and Photographer Shafer arrived at the airport and Shafer boarded the Beechcraft. Sturdy returned to his plane and proceeded to taxi to the east-west runway. O'Carroll hurriedly proceeded to the operations office for clearance, rushed out and boarded his airplane, which was parked on the parking strip adjacent to the clearance office and hangars, headed in a southerly direction. Meanwhile, Pilot Sturdy had arrived at the east end of the east-west runway headed east, warmed up his engine, made a 180° right turn and started his take-off toward the west. O'Carroll started the engine of the Beechcraft, turned slightly to the right of where he had been parked to head southwest on the southwest-northeast runway, and took off. This runway lies diagonally across the field and intersects the east-west runway near the southwest corner of the airport. When Sturdy, in the Culver, was a few feet off the ground, about 700 feet beyond his starting point, he observed the Beechcraft, also airborne and slightly higher, approaching from his right, headed southwest. Sturdy closed the throttle, veered off to the left to avoid what appeared to him would have been a collision, and landed. The aircraft made contact with the ground off the runway, rolled outside the airport boundary into an adjoining bean-patch and somersaulted to an inverted position, headed east. O'Carroll continued his flight until he reached the southern boundary of the field, over the area in which the Culver crashed, made a sharp left turn and proceeded to Chicago.

Description of the Wreckage

The Culver received damage to the landing gear, propeller, and engine cowling; the cabin was slightly crushed and the top of the rudder was bent and distorted. The condition of the propeller indicated that no power was being applied at the time of impact. Examination revealed no failure of any part of the alreaft prior to the accident.

Witnesses

From the signed statements made subsequent to the accident by eight witnesses, other than the pilots and passengers involved, and from the direct testimony of five of these witnesses who attended the hearing, it is apparent that all were positive in their belief that Sturdy, in the Culver, had already started his take-off and had procoeded a distance variously estimated by the witnesses to have been from 100 to 300 feet when O'Carroll, in the Beechcraft, commenced his take-eff. Home of the witnesses referred to above was acquainted with either of the pilots or passengers involved. Pilot O'Carroll testified that he secured his clearance from the flight office and before he boarded his plane he observed the Culver taxying down to the coutheast corner of the airport. He added that by the time he had boarded the Beechcraft and started his engine, the Culver was standing still, headed west on the east-west runway. O'Carroll said that his plane had been parked, headed at about 1100; that he looked around and observed no traffic and that immediately upon starting his engine he swung the ship around to the southwest and took off on the southwest-northeast runway; that he had his engine "wide open" as he "wanted to got every foot of runway." He stated that he was "coming up near the half-way mark" and then qualified it by saying. "I would not say half-way, but I would be coming near it", when he saw Sturdy start his take-off. He stated he continued on his take-off course, because he saw "that there was plenty of clearance" and when he reached the south boundary line of the airport he made a sharp left turn and proceeded to Chicago. He testified that after he had made this left turn and was heading east, he looked down and observed the Culver going west but was not sure whether the Culver was in the air or on the ground at that time. O'Carroll justified his using the northeast-southwest runway by saying that when he flew into the airport earlier in the afternoon he observed that the northeast-southwest runway was the longest and the best for take-off; that it "seemed to be the most traveled runway" and that "90 per cent of their take-offs were right from there." According to the testimony of the airport owner and manager, Harry L. Clugston, which was accompanied by a scale map of the sirport, docketed with the transcript as Exhibit No. 3, the northeast-southwest runway selected by O'Carroll is only 1700 feet in length, while the north-south and eastwest runways are approximately 2300 feet long. He also stated that "the N-S and the E-W (runways) are kept mowed" and amplified his remark by saying, "These two are kept green. We use the N-S runway most, because it is much longer."

Several of the witnesses described the action and quoted some of the remarks made by O'Carroll and his passenger, Shafer, before leaving the

ground which clearly indicated that they were in a hurry to get away. When O'Carroll was questioned at the hearing as to whether or not he had been in a hurry on this particular occasion, he answered, "I have always been in a hurry. I have been in a hurry 17 years, since I have been in this business.... Then I start out on a trip, no matter how far I am going, I am in a hurry until I get there.... I won't even ordinarily take time to eat, until I get where I am going. I have always been that way."

The discrepancies in fact, as given throughout O'Carroll's testimony, regarding the approximate length, the obstructions adjacent to and the condition of the different runways, made it apparent that he had made little or no appraisal of the best runway for take-off. estimated the wind velocity, he did so incorrectly as he stated that there was no wind, and there was evidence that the wind was north-northwest 5 m.p.h. It appeared by his testimony that he was attempting manipulation of facts, conditions and circumstances regarding his performance from the time he boarded his airplane until the time he made his left turn and proceeded on to Chicago. Pilot O'Carroll is no novice and has been flying for approximately 17 years. O'Carroll's passenger. Shafer, was not available for testimony at the hearing as, since the accident, he had been sent on an assignment which took him out of the country. In a signed statement he made subsequent to the accident his story coincided fairly well with that of O'Carroll. O'Carroll testified that he had known Shafer for about ten years and at various times had flown him "all over the country." Pilot Sturdy testified that after obtaining his clearance and while he was proceeding to his airplane Shafer called out to him, "Do you want to make a bet we'll beat you back to Chicago?" to which he replied, "What do you want, a sure thing, and a twenty dollar gold piece besides?" Sturdy stated that it amused him at the time because O'Carroll's airplane was a good deal faster than his and "it was a cinch they could beat me." Sturdy said that he had been informed by the clearance officer that the east-west runway was the longest and most suitable and that just before boarding his airplane the questioned the airport manager about the runway, who, in turn, confirmed the information the clearance officer had given him. He stated that after one of the men at the airport assisted him in starting his engine, he taxied south along the extreme cast boundary of the field to the southeast corner of the airport. After warming and checking his engine and magnetoes, he observed that the "Beechcraft was still apparently in the position it was when I started taxying down the field." He stated that at this time he (Sturdy) was headed east to observe any incoming traffic; that he made a 1800 turn on the ground, and headed west, then began his take-off in the usual manner, giving the engine full throttle. He testified, "The take-off went normally. When I was just about, oh, I just got airberne I think. I was perhaps just holding it off the ground. I couldn't have had more than a foot or two of altitude when into my field of vision from the right side, I saw the Beechcraft taking off in a southwesterly direction, on a course that would intersect mine. We were only a few hundred feet. apart..... . The thing happened so fast but we were pretty close and it appeared to me that we would collide." When questioned whether or not the Beechcraft was airborne at this time, he answered in the

affirmative and estimated its altitude as "less than 20 feet." He stated that at the point where he concluded a collision was probable he "pulled the throttle closed, and got the airplane headed a little to the left, to give myself as much leeway as I could to stop." Sturdy's passenger, Piercy, stated that he did not observe the beechcraft start its take-off as his attention was being directed to come maps which he had expected to follow, for amusement, on the return trip and that the first he saw of the Beechcraft after the Culvar had taken off was when Sturdy pointed it out to him just before Sturdy cut the throttle and prepared to land.

Findings

- 1. A near collision in mid-air between a Culver, NC 29256, and a Beechcraft, NC 15847, occurred on the Macemb, Illinois Airport et abeut 6:40 p.m. en August 14, 1943. Pilot Sturdy was scriously injured and his passenger received no injuries.
- 2. There was no evidence of failure of any part of the Culver prior to the accident. It was damaged to a major extent.
- 3. Weather conditions were satisfactory for the flights and did not contribute to the accident.
- 4. All witnesses to the accident, except Pilet O'Carroll and his passenger, Shafer, were ununimous in their belief that Pilet Sturdy's take-off was already under way when Pilet O'Carroll started his take-off on a runway which intersects the one being used by Sturdy.
- 5. When the flights had proceeded to a point where Sturdy felt a collision was imminent, he throttled his engine and effected an emergency landing which resulted in the aircraft contacting the ground off the runway, rolling reyond the airport boundary, and nosing over on its back.
 - 6. O'Carrell continued his take-off and proceeded on to Chicago.
- 7. It was evident that Sturdy expressed good judgment and hadded all necessary procautions during talk-off.
- s. It is equally evident that O'Carroll exercised entremely poor judgment and disregarded the processions as prescribed by Civil Air Acgulations and ordinary good practice during take-off.

PROBABLE CAUSE

Whereas the immediate cause of this accident was Pilot Sturdy's emergency landing to avoid possible collision with another aircraft during take-off, the emergency was created by Pilot O'Carroll's disregard of safety in taking off across the flight path of an aircraft which had already started its take-off run.

APPROVED:

/s/ L. Welch Poque

/s/ Oswald Ryan
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/s/ Edward Warner Edward Warner

/s/ Josh Lee
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